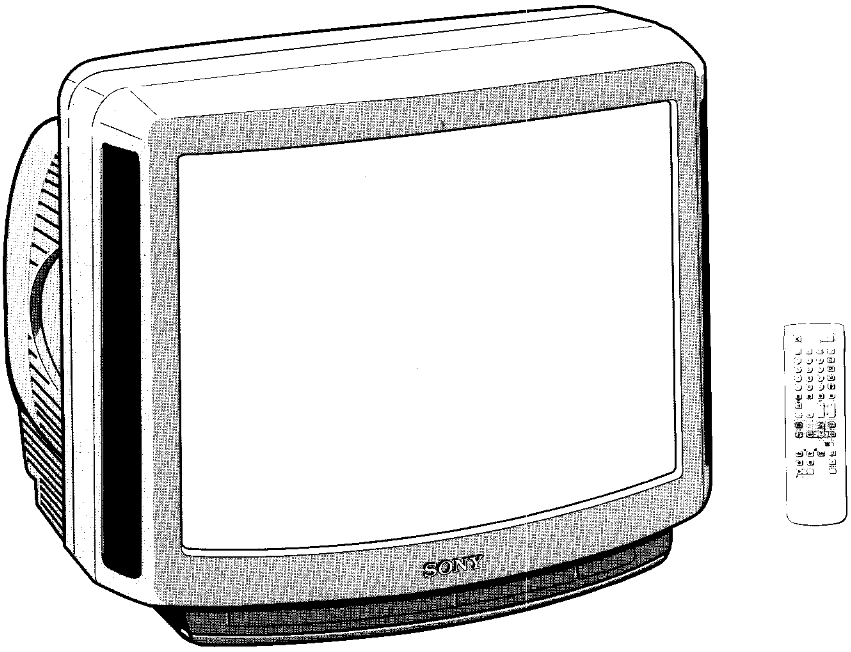
SERVICE MANUAL

AE-2F CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-X2991A	RM-831	Italian	SCC-G76C-A
KV-X2993B	RM-831	French	SCC-G75C-A
KV-X2991D	RM-831	AEP	SCC-G72D-A
KV-X2993E	RM-831	Spanish	SCC-G78C-A



MICROFILM

TRINITRON® COLOR TV

SONY®

ITEM MODEL	Television system	Stereo system	Channel coverage	Color system
Italian	B/G/H, D/K	GERMAN Stereo	ITALIA VHF:A-H2 (C) UHF:21-69 PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
French	B/G/H, D/K L, I	GERMAN Stereo	L VHF:F02-F10 UHF:F21-F60 CABLE:B-Q B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
AEP	B/G/H, D/K	GERMAN Stereo	PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Spanish	B/G/H, D/K	GERMAN/NICAM Stereo	PAL B/G VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)

MODEL	Italian	French	AEP	Spanish
Power Consumption	137W	154Wh	153W	154W

SPECIFICATIONS

Picture tube	Super Trinitron Approx. 72 cm (29 inches) (Approx. 68 cm picture measured diagonally) 110° -deflection

Input/Output Terminals

[REAR]

W 1 21-pin Euro connector (CENELEC standard)

Inputs for audio and video signals

- inputs for RGB
- outputs of TV video and audio signals

: 2/q 2 21-pin Euro connector

- inputs for audio and video signals
- inputs for S video
- outputs for audio and video signals (selectable)

⊖ Audio outputs (variable) - phono jacks

[FRONT]

... 3 Video input-phono jack

-⊙ Audio input-phono jacks

q 3 S video input 4-pin DIN

2 Headphone jack : Stereo minijack

Sound output	2x12W RMS 2x30W Music power
Power consumption	Approx. 153W

Dimensions	Approx. 676 x 557 x 528 mm (w/h/d)
Weight	Approx. 48 kg
Supplied accessories	RM-831 Remote Commander (1) RM-860 Scroll Commander (1) IEC designation R6 batteries (2)
Other features	FASTEXT, TOPTEXT 100 Hz Digital Plus

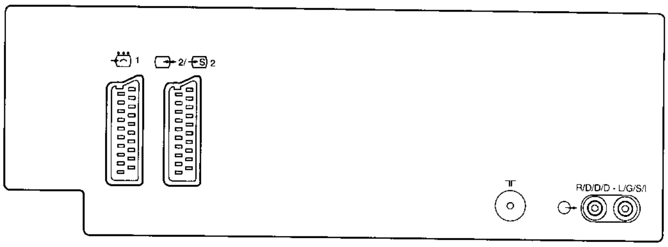
[RM-831]

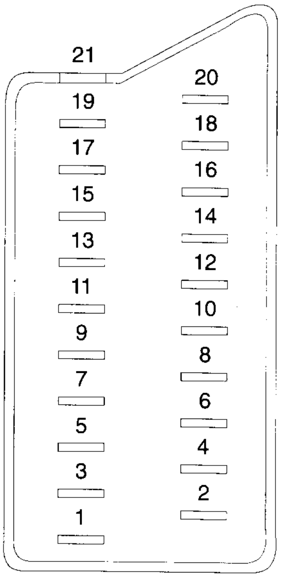
Remote control system	infrared control
Power requirements	1.5V dc 1 battery IEC designation R6 (size AA)
Dimentions	Approx. 65 x 225 x 21 mm (w/h/d)
Weight	Approx. 157g (Not including Batteries)

Design and specifications are subject to change without notice.

Model name / Item	KV-X2991A	KV-X2993B	KV-X2991D	KV-X2993E
Pal Comb	OFF	OFF	OFF	OFF
PIP	OFF	OFF	OFF	OFF
RGB Priority	ON	ON	OFF	OFF
Woofer Box	OFF	OFF	OFF	OFF
Scart 1	ON	ON	ON	ON
Scart 2	ON	ON	ON	ON
Front in (3)	ON	ON	ON	ON
Scart 4	OFF	OFF	OFF	OFF
Dyn. Convergence	OFF	OFF	OFF	OFF
Projector	OFF	OFF	OFF	OFF
AKB in 16:9 mode	ON	ON	ON	ON
Norm B/G	ON	ON	ON	ON
Norm I	OFF	ON	OFF	OFF
Norm D/K	ON	ON	ON	ON
Norm AUS	OFF	OFF	OFF	OFF
Norm L	OFF	ON	OFF	OFF
Norm SAT	OFF	OFF	OFF	OFF
Norm M	OFF	OFF	OFF	OFF
Graphic EQualizer	OFF	OFF	OFF	OFF
Language Preset	Italiano	Francais	Deutsch	None

21 pin connector (W 1 : 2)





Pin No.	1	2	Signal	Signal level
1	®	®	Audio output B (right)	Standard level : 0.5V rms Output impedance : Less than 1kohm*
2	®	®	Audio input B (right)	Standard level : 0.5V rms Input impedance : More than 10kohm*
3	®	®	Audio output A (left)	Standard level : 0.5V rms Output impedance : Less than 1kohm*
4	®	®	Ground (audio)	
5	®	®	Ground (blue)	
6	®	®	Audio intput A (left)	Standard level : 0.5V rms Input impedance : More than 10kohm*
7	®	r	Blue input	0.7 ± 3dB, 75 ohms, positive
8	®	®	Function select (AV control)	High state (9.5 - 12V) : Part mode Low state (0 - 2V) : TV mode Input impedance : More than 10kohms Input capacitance : Less than 2nF
9	®	®	Grounf (green)	
10	®	®	Open	
11	®	r	Green	Green signal : 0.7 ± 3dB, 75 ohms, positive
12	®	®	Open	
13	®	®	Ground (red)	
14	®	®	Ground(blanking)	
15	®	–	Red input	0.7V ± 3dB, 75 ohms, positive
	–	®	(S signal) croma input	0.3V ± 3dB, 75 ohms, positive
16	®	r	Blanking input (Ys signal)	High state (1 - 3V) Low state (0 - 0.4V) Input impedance : 75ohms
17	®	®	Ground (video output)	
18	®	®	Ground (video input)	
19	®	®	Video output	1V ± 3dB,75ohms, positive sync:0.3V(-3+10dB)
20	®	–	Video input	1V ± 3dB,75ohms, positive sync:0.3V(-3+10dB)
	–	®	Video input Y (S signal)	1V ± 3dB,75ohms, positive sync:0.3V(-3+10dB)
21	®	®	Common ground (plug, sheild)	

® Connected　　r Not Connected (open)　　* at 20Hz - 20kHz

TABLE OF CONTENTS

Section *Title* *Page*

1. GENERAL

Overview 6
Step 1 Preparation 7
Step 2 Connection 7
Step 3 Tuning in to TV stations 7
Additional Presetting Functions 9
Watching the TV 10
Adjusting and Setting the TV using the Menu 11
Teletext 12
Connecting and Operating Optional Equipment 14

2. DISASSEMBLY

2-1. Rear Cover Removal 15
2-2. Chassis Assy Removal 15
2-3. Service Position 16
2-4. Extension Board 16
2-5. PCB Supporter and Shield Case Removal 17
2-6. J Board Removal 17
2-7. G and A2 Boards Removal 17
2-8-1. Wire Dressing 18
2-8-2. Wire Dressing 18
2-9. Picture Tube Removal 19

3. SET-UP ADJUSTMENTS

3-1. Beam Landing 21
3-2. Convergence 22
3-3. Focus 23
3-4. White Balance 24

4. CIRCUIT ADJUSTMENTS

4-1. Electrical Adjustments 25
4-2. Volume Electrical Adjustments 29
4-3. Test Mode 2 : 30
4-4. Error Message 32
4-5. Error II C Bus Diagnosis System in AE-2F Chassis 32

Section *Title* *Page*

5. DIAGRAMS

5-1. Block Diagrams (1) 33
Block Diagrams (2) 35
Block Diagrams (3) 37
Block Diagrams (4) 39
Block Diagrams (5) 41
Block Diagrams (6) 42
Block Diagrams (7) 43
Block Diagrams (8) 45
Block Diagrams (9) 47
Block Diagrams (10) 49
Block Diagrams (11) 50
5-2. Circuit Boards Location 52
5-3. Schematic Diagrams and Printed Wiring Boards 52
* A Board 57
* J Board 63
* A2 Board 71
* D Board 75
* B Board 80
* Q Board 86
* G Board 95
* F1 Board 97
* C Board 99
* M3 Board 103
* D6 Board 106
* VM Board 108
* D2 Board 111
* D7 Board 113
* H1 Board 113
* H2 Board 113
* IFH-389 Board 115
* IFH-389FX Board 118
5-4. Semiconductors 121

6. EXPLODED VIEWS

6-1. Chassis 124
6-2. Picture Tube 125

7. ELECTRICAL PARTS LIST 126

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVAL OF THE ANODE CAP.

WARNING !!

AN ISOLATING TRANSFORMER SHOULD BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD, DUE TO A LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARKED ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLIMENTS PUBLISHED BY SONY.

ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÈ LORS DE TOUT DÈPANNAGE. LE CHÁSSIS DE CE RÈCEPTEUR EST DIRECTEMENT RACCORDÈ Á L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS Á LA SÈCURITÈ !!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE ⚠ SUR LES SCHÈMAS DE PRINCIPE, LES VUES EXPLOSÈES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÈCURITÈ DU FONCTIONNEMENT, NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÈRO DE PIÈCE EST INDIQUÈ DANS LE PRÈSENT MANUEL OU DANS DES SUPPLÈMENTS PUBLIÈS PAR SONY.

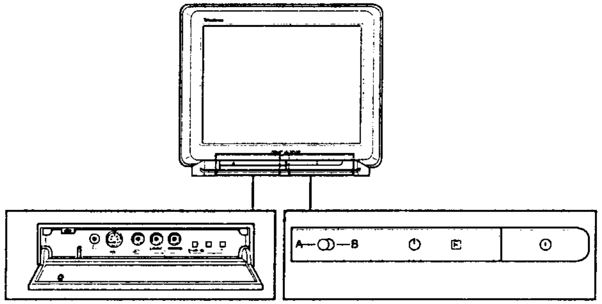
SECTION 1
GENERAL

The operating instructions mentioned here are partical abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remein as in the manual.

Overview

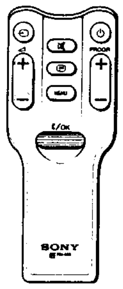
This section briefly describes the buttons and controls on the TV set and on the Remote Commander. For more information, refer to the pages given next to each description.

TV set - front



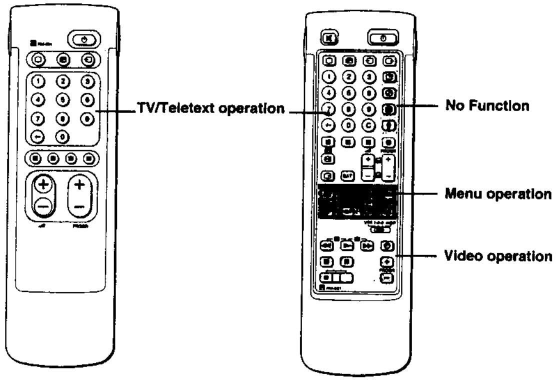
Symbol	Name	Refer to page
⏼	Main power switch	39
⏻	Standby indicator	39
A-ↀ-B	Stereo A/B indicators	41
🎧	Headphones jack	46
⇥Ⓢ3, ⇥◯ 3, ⇥⊙ 3	Input jacks (S-video/video/audio)	46
P→◿→⇥◯	Function selector (Programme/volume/input)	39
– +	Adjustment buttons for function selector	39

Scroll Commander RM-860



Note
The SAT button does not operate with this TV.

Remote Commander RM-831



Simple side

Full-Function side

TV/Teletext operation

Symbol	Name	Refer to Page
🔇	Mute on/off button	40
⏻	Standby button	39
▢	TV power on/TV mode selector button	39
▤	Teletext button	40
⇥◯	Input mode selector	40
◯→	Output mode selector	47
1,2,3,4,5,6, 7,8,9, and 0	Number buttons	39
–/– –	Double-digit entering button	39
C	Direct channel entering button	36
◿+/–	Volume control button	39
PROGR +/–	Programme selectors	39
▭▭	Teletext page access buttons	43
●	Picture adjustment button	41
♪	Sound adjustment button	41
⊡	On-screen display button	40
⊞	Teletext hold button	43
◷	Time display button	40
■■■■	Fastext buttons	43

Menu operation

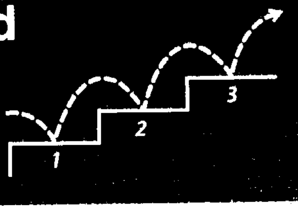
Symbol	Name	Refer to Page
MENU	Menu on / off button	33
+/–	Select buttons	33
OK	OK (confirming) button	33
⬅	Back button	33
↕ /OK	Scroll Commander: Roller to select/ confirm menu functions	33

Video operation

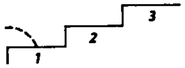
Symbol	Name	Refer to Page
VTR1/2/3 MDP	Video equipment selector	48
◀◀ ▶ ▶▶ ■ ❚❚ ● ⏻ PROGR +/–	Video equipment operation buttons	48

GB

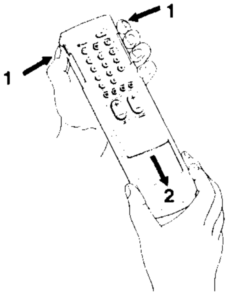
Getting Started



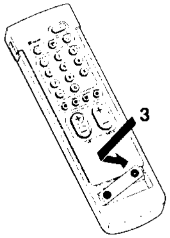
Step 1 Preparation



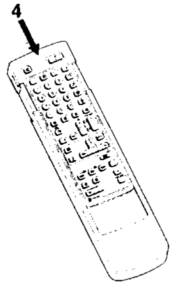
Insert the batteries into the Remote Commanders



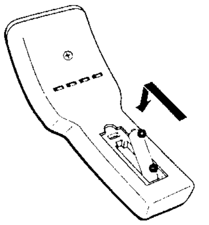
Remove the cover.



Check the correct polarity.

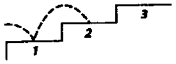


Refit the outside cover making sure that the Full-Function side is visible to use the menu in Step 3.

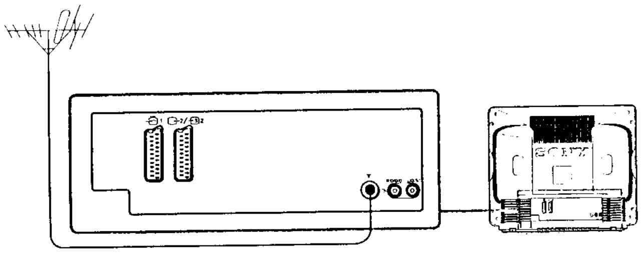


Check the correct polarity.

Step 2 Connection

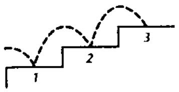


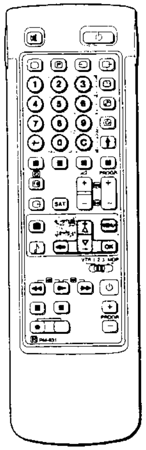
Connect the aerial



Fit an IEC aerial connector attached to 75-ohm coaxial cable (not supplied) to the ⫪ socket at the rear of the TV.

Step 3 Tuning in to TV Stations





Once you have set up the TV, you can choose the language of the menu. Then you should preset the channels (up to 60 channels) by choosing either the automatic or manual method.

The automatic method is easier if you want to preset all receivable channels at once. Use the manual method if you only have a few channels and want to preset channels one by one. The manual method is also convenient for allocating programme numbers to various video input sources.

Before you begin

- Check that the Full-Function side of the Remote Commander is visible.
- Locate Menu operation buttons on the Remote Commander. They are shaded in the illustration at the left.They are shaded in the illustration at the left.

Easy Menu operation using the Scroll Commander

In addition to our double-sided Remote Commander, your TV set is supplied with an extra Remote Commander. The "Scroll Commander" works with a roller for convenient, fast-access operation of the menu functions.
Move the roller upwards to move the cursor upwards, move the roller downwards to move the cursor downwards, press the roller to confirm a selection. The other buttons on this commander have the same functions as the respective buttons on the double-sided Remote Commander.

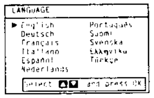
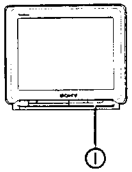

LANGUAGE
▶ English
Deutsch
Français
Italiano
Español
Nederlands
Português
Suomi
Svenska
Ελληνικά
Türkçe
Select ▲▼ and press OK

Fig. 1.



To go back to main menu:
Keep pressing ←.

To go back to the normal TV picture:
Press MENU. Normal TV picture will be restored after one minute if menu functions are not selected.

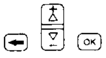
Note on the Demo function:
If you choose Demo on the main menu, you can see a sequential demonstration of the menu functions. Press MENU to stop the function.

❶ Choose a language

1 Depress ⏻ on the TV.
The TV will switch on. If the standby indicator on the TV is lit, press ○ or a number button on the Remote Commander.

2 Press the MENU button.
The »LANGUAGE« menu appears. (See Fig. 1)

3 Select the language you want with △+ or ▽−, and then press OK.



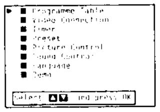

▶ Programme Table
Video Connection
Timer
Preset
Picture Control
Sound Control
Language
Demo
Select ▲▼ and press OK

Fig. 2.

❷ Display the Menu

Press the ← button.
The main menu appears. (See Fig. 2)

Now, choose one of the methods described overleaf:

"Preset Channels Automatically"

or

"Preset Channels Manually".

With this method, you can preset all receivable channels at once.

To stop automatic channel presetting:
Press ← on the Remote Commander.

Notes:
- After presetting the channels automatically, you can check which channels are stored on which programme positions. For details, see "Using the Programme Table" on page 42.
- You can sort the programme positions to have them appear on screen in the order you like. For details, see "Sorting the Programme Positions" on page 36.
- Programme names are automatically taken from Teletext if available. If not, please refer to page 37 "Captioning a station name".

❸ Preset channels automatically

1 Select »Preset« with △+ or ▽– and press OK.
The »PRESET« menu appears. (See Fig. 3.)

2 Select »Auto Programme« with △+ or ▽– and press OK.
The »AUTO PROGRAMME« menu appears. (See Fig. 4.)

3 Press OK.
Select if necessary the TV broadcast system with △+ or ▽– and press OK. (B/G for western European countries, D/K for eastern European countries) The first element of the "PROG" number will be highlighted.

4 Select the programme (number button) from which you want to start presetting. Select the first element of the double-digit number with △+ or ▽– or the number buttons (e.g. For "04", select "0" here) and press OK.
The second element of "PROG" will be highlighted.

5 Select the second element of the double-digit number with △+ or ▽– or the number buttons (e.g. For "04", select "4" here) (See Fig. 5.) and press OK.

6 Select "C" or "S" with △+ or ▽– and press OK.
The automatic channel presetting starts.
When presetting is finished the preset menu reappears.
All available channels are now stored on successive number buttons. (Press MENU to restore normal TV picture.)

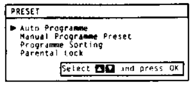


Fig. 3.

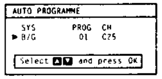


Fig. 4.

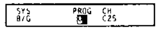


Fig. 5.

Use this method if there are only a few channels in your area to preset or if you want to preset channels one by one. You may also allocate programme numbers to various video input sources.

If you have made a mistake:
Press ← to go back to the previous position.
To go back to main menu:
Keep pressing ←.
To go back to the normal TV picture:
Press MENU.

❸ Preset channels manually

1 Select »Preset« with △+ or ▽– and press OK.
The »PRESET« menu appears. (See Fig. 6.)

2 Select »Manual Programme preset« with △+ or ▽– and press OK.
The »MANUAL PROGRAMME PRESET« menu appears. (See Fig. 7.)

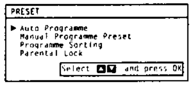
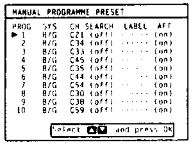


Fig. 6.



```
MANUAL PROGRAMME PRESET
PROG  SYS  CH SEARCH  LABEL  AFT
▶ 1   B/G  C21 (off)  ······ (on)
  2   B/G  C34 (off)  ······ (on)
  3   B/G  C33 (off)  ······ (on)
  4   B/G  C45 (off)  ··   · (on)
  5   B/G  C35 (off)  ·· ·   (on)
  6   B/G  C44 (off)     ··  (on)
  7   B/G  C54 (off)  ··  ·  (on)
  8   B/G  C30 (off)    ···· (on)
  9   B/G  C38 (off)  ······ (on)
 10   B/G  C59 (off)  ······ (on)
Select ▲▼ and press OK
```

Fig. 7.

To tune in a channel by frequency:
After selecting F in step 6, enter three digits using the number buttons.
Press OK.

3 Using △+ or ▽–, select the programme position (number button) to which you want to preset a channel, and press OK.

4 Keep pressing ▽– to select programme numbers higher than 10.

5 Select if necessary the TV broadcast system (B/G for western European countries, D/K for eastern European countries) or a video input source (EXT) with △+ or ▽–.
Then press OK. The CH position will be highlighted. (See Fig. 8.)

6 Using △+ or ▽–, select C (to preset a regular channel), or F (to tune in by frequency), or S (cable channel) and press OK.
The first element of the "CH" number will be highlighted.
If you have selected EXT in step 5, select the video input source with △+ or ▽–. (See Fig. 9.)

There are two ways to preset channels. If you know the channel number, go to step "7-Manual",

or

if you don't know the channel number, go to step "7- Search".

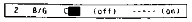


Fig.8.

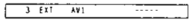


Fig.9.

If you have made a mistake:
Press ← to go back to the previous position.
To go back to main menu:
Keep pressing ←.
To go back to the normal TV picture:
Press MENU.

7 ***Manual***

-a Select the first element of the "CH" number with △+ / ▽– or the number buttons and press OK.
The second element of the "CH" number will be highlighted.

-b Select the second element of the number with △+ / ▽– or the number buttons.
The selected number appears. (See Fig. 10.)

-c Press OK
The "SEARCH" position is highlighted and the selected channel is now stored. (See Fig. 11.)

-d Press OK until the cursor appears by the next programme position.

-e Repeat steps 3 to 7 to preset other channels.

7 ***Search***

-a Press OK repeatedly until the colour of the SEARCH position changes.

-b Start searching for the channel with △+ (up) or ▽– (down).
The CH position changes colour. (See Fig. 12.)
The CH number starts counting up or downwards. When a channel is found, it stops. (See Fig. 13.)

-c Press OK if you want to store this channel. If not, press △+ or ▽– to continue channel searching.

-d Press OK until the cursor appears by the next programme position.

-e Repeat steps 3 to 7 to preset other channels.

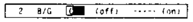


Fig.10.

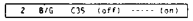


Fig.11.

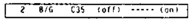


Fig.12.

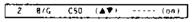
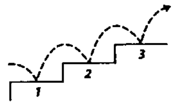


Fig.13.

Additional Presetting Functions



This section shows you additional presetting functions such as sorting or skipping programme positions, captioning a station name, manual fine-tuning, and using the parental lock.

Before you begin

- Check that the Full Function side of the Remote Commander is visible
- Locate the Menu operation buttons.

PROGRAMME SORTING

Sorting Programme Positions

With this function, you can sort the programme positions to a preferable order.

1 Press MENU to display the main menu.

2 Select »Preset« with △+ or ▽– and press OK.
The »PRESET« menu appears.

3 Select »Programme Sorting« with △+ or ▽– and press OK.
The »PROGRAMME SORTING« menu appears. (See Fig. 14.)

4 Using △+ or ▽–, select the programme position you want to move to another programme position and press OK.
The colour of the selected position changes. (See Fig. 15.)

5 Using △+ or ▽–, select the programme position to which you want to move the selected programme and press OK. Now the two programme positions have been sorted. (See Fig. 16.)

6 Repeat steps 4 and 5 to exchange other programme positions.

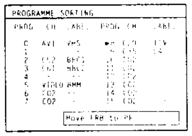

PROGRAMME SORTING

Fig. 14.

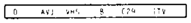


Fig. 15.

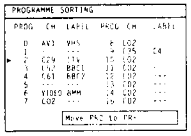
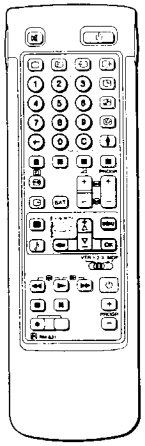

PROGRAMME SORTING

Fig. 16.



For higher programme positions:
The display scrolls automatically.

Tuning in a Channel Temporarily

Ⓒ

You can tune in a channel temporarily, even when it has not been preset. Use the buttons on the Full-Function side of the Remote Commander.

1 Press C on the Remote Commander. For cable channels, press C twice. The indication "C" ("S" for cable channels) appears on the screen.

2 Enter the double-digit channel number using the number buttons (e.g. for channel 4, first press 0, then 4).
The channel appears.
However, the channel will not be stored.

If you have made a mistake:
Press ⬅ to go back to the previous position.

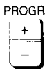
To go back to main menu:
Keep pressing ⬅.

To go back to the normal TV picture:
Press MENU.

MANUAL PROGRAMME PRESET

Skipping Programme Positions

You can skip unused programme positions when selecting programmes with the PROGR +/- buttons. However, the skipped programmes may still be called up when you use the number buttons.



1 Press MENU to display the main menu.

2 Select »Preset« with △+ or ▽– and press OK.
The »PRESET« menu appears.

3 Select »Manual Programme Preset« with △+ or ▽– and press OK.
The »MANUAL PROGRAMME PRESET« menu appears. (See Fig.17.)

4 Using △+ or ▽–, select the programme position which you want to skip and press OK.
The "SYSTEM" position changes colour.

5 Press △+ or ▽– until – – – appears in the SYSTEM position. (See Fig. 18.)

6 Press OK. (See Fig. 19.)
When you select programmes using the PROGR +/– buttons, the programme position will be skipped.

7 Repeat steps 4 to 6 to skip other programme positions.

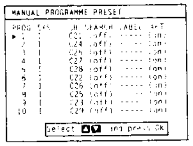

MANUAL PROGRAMME PRESET

Fig. 17.

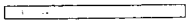


Fig. 18.

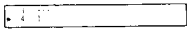


Fig. 19.

MANUAL PROGRAMME PRESET

Captioning a Station Name

Programme names are automatically taken from Teletext if available. However you can also "name" a channel or an input video source using up to five characters (letters or numbers) to be displayed on the TV screen (e.g. BBC1). Using this function, you can easily identify which channel or video source you are watching.

1 Press MENU to display the main menu.

2 Select »Preset« with △+ or ▽– and press OK.
The »PRESET« menu appears.

3 Select »Manual Programme Preset« with △+ or ▽– and press OK.
The »MANUAL PROGRAMME PRESET« menu appears. (See Fig. 20.)

4 Using △+ or ▽–, select the programme position you want to caption and press OK repeatedly until the first element of the LABEL position is highlighted.

5 Select a letter or number with △+ or ▽– and press OK.The next element will be highlighted.
Select other characters in the same way. If you want to leave an element blank, select - and press OK. (See Fig. 21.)

6 After selecting all the characters, press OK repeatedly until the cursor appears by the next programme position (at the left margin). Now the caption you chose is stored. (See Fig. 22.)

7 Repeat steps 5 and 6 to caption names for other channels.

If you have made a mistake:
Press ⬅ to go back to the previous position.

To go back to main menu:
Keep pressing ⬅.

To go back to the normal TV picture:
Press MENU.

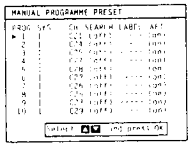

MANUAL PROGRAMME PRESET

Fig. 20.

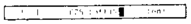


Fig. 21.

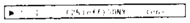


Fig. 22.

MANUAL PROGRAMME PRESET

Manual Fine-Tuning

Normally, the AFT(automatic fine-tuning) is already operating. However, if the picture is distorted, you can use the manual fine tuning function to obtain better picture reception.

1 Press MENU to display the main menu.

2 Select »Preset« with △+ or ▽– and press OK.
The »PRESET« menu appears.

3 Select »Manual Programme Preset« with △+ or ▽– and press OK.
The »MANUAL PROGRAMME PRESET« menu appears. (See Fig. 23.)

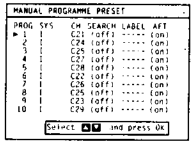
4 Using △+ or ▽–, select the programme position corresponding to the channel which you want to manually fine-tune, and press OK repeatedly until the AFT position changes colour.

5 Fine-tune the channel with △+ or ▽– so that you get the best TV reception. As you press the cursor buttons, the frequency changes from –15 to +15. (See Fig. 24.)

6 After fine tuning, press OK.
The cursor appears beside the next programme position (at the left margin). (See Fig. 25.) Now the fine-tuned level is stored.

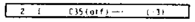
7 Repeat steps 4 to 6 to fine-tune other channels.

To reactivate AFT (automatic fine tuning): Repeat from the beginning and select "ON" in step 5.



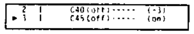
```
MANUAL PROGRAMME PRESET
PROG  SYS    CH  SEARCH LABEL  AFT
► 1    I     C21 (off)  -----  (on)
  2    I     C24 (off)  -----  (on)
  3    I     C25 (off)  -----  (on)
  4    I     C27 (off)  -----  (on)
  5    I     C28 (off)  -----  (on)
  6    I     C22 (off)  -----  (on)
  7    I     C26 (off)  -----  (on)
  8    I     C25 (off)  -----  (on)
  9    I     C23 (off)  -----  (on)
 10    I     C29 (off)  -----  (on)
        Select ▲▼ and press OK
```

Fig. 23.



```
  2   I        C35(off)—·      (-3)
```

Fig. 24.



```
  2   I        C40(off)-----   (-3)
► 3   I        C45(off)-----   (on)
```

Fig. 25.

PARENTAL LOCK

Parental Lock

You can prevent undesirable broadcasts from appearing on the screen. We suggest you use this function to prevent children from watching programmes which you consider unsuitable.

1 Press MENU to display the main menu.

2 Select »Preset« with △+ or ▽– and press OK.
The »PRESET« menu appears.

3 Select »Parental Lock« with △+ or ▽– and press OK.
The »PARENTAL LOCK« menu appears. (See Fig. 26.)

4 Using △+ or ▽–, select the programme position you want to block and press OK.
The CH and LABEL, of the selected programme number, change colour indicating that this programme is now blocked.
(See Fig. 27.)

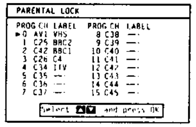
5 Repeat step 4 to block other programme positions.

If you try to select a programme that has been blocked: The message "LOCKED" appears on the blank TV screen.

Cancelling blocking

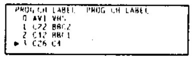
1 On the »PARENTAL LOCK« menu, select the programme position you want to unblock with △+ or ▽–.

2 Press OK.
The CH and LABEL change to normal colour indicating that the blocking has been cancelled.



```
PARENTAL LOCK
PROG CH  LABEL    PROG CH  LABEL
► 0  AV1 VHS         8 C38  —·
  1  C25 BBC2        9 C39  —·
  2  C42 BBC1       10 C40  —·
  3  C26 C4         11 C41  —·
  4  C34 ITV        12 C42  —·
  5  C35 —·         13 C43  —·
  6  C36 —·         14 C44  —·
  7  C37 —·         15 C45  —·
     Select ▲▼ and press OK
```

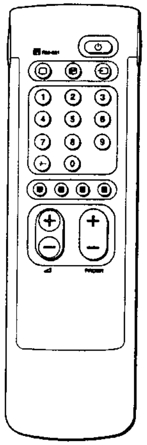
Fig. 26.



```
PROG CH  LABEL   PROG CH  LABEL
  0  AV1 VHS
  1  C22 BBC2
  2  C12 BBC1
► 3  C26 C4
```

Fig. 27.

Watching the TV

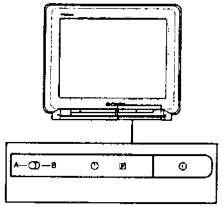


If no picture appears when you depress Ⓘ on the TV

and if the standby indicator on the TV is lit, the TV is in standby mode. Press ▢ or one of the number buttons to switch it on.

This section explains the basic functions you use while watching TV. Most of the operations can be done using the simple side of the Remote Commander.

Switching the TV on and off



Switching on

Depress Ⓘon the TV.

Switching off temporarily

Press ⏻ on the Remote Commander.
The TV enters standby mode and the standby indicator on the front of the TV lights up.

To switch on again

Press ▢, PROGR +/–, or one of the number buttons on the Remote Commander.

Switching off completely

Depress Ⓘ on the TV.

Selecting TV Programmes

Press PROGR +/– or press number buttons.

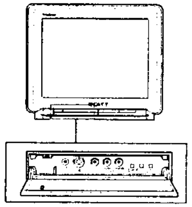
To select a double-digit number

Press -/--, then the numbers.
For example, if you want to choose 23, press -/--, 2, and 3.

Adjusting the Volume

Press ⊿ +/–.

Operating the TV Using the Buttons on the TV

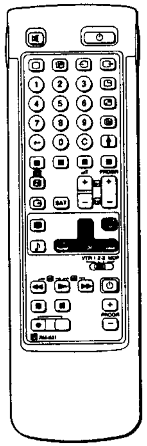


With the buttons on the TV, you can select programmes, adjust the volume, and select video input sources.

- Press P-⊿-⊙ button repeatedly until the programme number, ⊿ (for volume), or -⊙ (for video input picture) appears. Then adjust with the –/+ buttons.
- Press –/+ buttons to switch on the TV from the standby mode.
- Press –/+ simultaneously to reset picture and sound controls to the factory preset level (RESET symbol →•← is displayed).

For details of the teletext operation, refer to page 43.

For details of the video input picture, refer to page 47.



Watching Teletext or Video Input

Watching teletext

- Press ⊜ to view the teletext.
- Press three number buttons to select a page.
- Press one of the coloured buttons for fastext operation.
- Press ⊕ (PAGE +) or ⊖ (PAGE –) for the next or preceeding page.
- To go back to the normal TV picture, press ▢.

Watching a video input picture

Press -⊙ repeatedly until the desired video input appears. To go back to the normal TV picture, press ▢.

More Convenient Functions

Use the Full-Function side of the Remote Commander.

Displaying the on screen indications

- Press ⊕ once to display all the indications. They will disappear after some seconds.
- Press ⊕ twice to have the programme number and label stay on screen. Press twice again to make indications disappear.

Muting the sound.

Press 🔇.
To resume normal sound, press 🔇 again.

Displaying the time

Press ⊘. This function is available only when teletext is broadcast.
To make the time display disappear, press ⊘ again.

Displaying of the Programme Table

Press OK. A Programme Table will be displayed on the right side of the TV screen (See. Fig.28)

Selecting of TV programmes

Press PROGR +/- or select the desired programme position using △+ or ▽– and press OK.

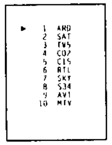
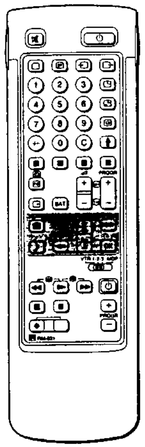


Fig.28.

To make the Programme Table disappear
Press MENU.

Adjusting and Setting the TV Using the Menu

PICTURE CONTROL
SOUND CONTROL



If you have made a mistake:
Press ⇦ to go back to the previous position.
To go back to the main menu:
Keep pressing ⇦.
To go back to the normal TV picture:
Press MENU.

Note:
HUE is only available for NTSC colour system.

Note on LINE OUT:
The audio level and the dual sound mode output from the ⊖ jack on the rear correspond to the HEADPHONES VOLUME and DUAL SOUND settings.

When watching a video input source with stereo sound:
You can select DUAL SOUND to change the sound.

Adjusting the Picture and Sound

Although the picture and sound are adjusted at the factory, you can adjust them to suit your own taste. In addition, you can change the aspect ratio of the TV display for wide screen effect. You can also select dual sound (bilingual) programmes when available or adjust the sound for listening with the headphones (Ω).

1 Press ● (for picture) or ♪ (for sound) on the Remote Commander.

or

Press MENU and select »Picture Control« or »Sound Control«, then press OK.
The »PICTURE CONTROL« or »SOUND CONTROL« menu appears. (See Fig. 29 or Fig. 30)

2 Using △+ or ▽–, select the item you want to adjust and press OK.The selected item changes colour. (See Fig. 31)

3 Adjust the setting with △+ or ▽ – and press OK.
The cursor appears beside the next item (at the left margin). (See Fig. 32)
For the effect of each control, see the table below.

4 Repeat steps 2 and 3 to adjust other items.

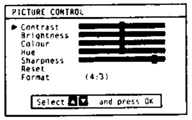


Fig. 29.

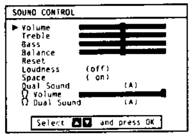


Fig. 30.

Brightness

Fig. 31.

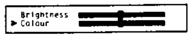


Fig. 32.

GB

Effect of each control

PICTURE CONTROL	Effect
Contrast	Less ——I—— More
Brightness	Darker ——I—— Brighter
Colour	Less ——I—— More
Hue	Greenish ——I—— Reddish
Sharpness	Softer ——I—— Sharper
Reset	Resets picture to the factory preset levels.
Format	4 : 3 : Normal 16 : 9 : Wide screen effect

SOUND CONTROL	Effect
Volume	Less —I— More
Treble	Less —I— More
Bass	Less —I— More
Balance	More left —I— More right
Reset	Resets sound to the factory preset levels.
Loudness	off : Normal on : When listening to low volume sound.
Space	off : Normal on : Obtain acoustic sound effect.
Dual Sound	A : left channel B : right channel stereo mono The selected mode of the A-CD-B indicator on the TV lights up. (for NICAM broadcasts see next page)
Headphones:	
Ω Volume	Less —I— More
Ω Dual Sound	A : left channel B : right channel STEREO MONO

PROGRAMME TABLE

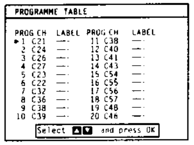
To go back to the normal TV picture:
Press MENU.

Using the Programme Table

On this table, you can see which channel is preset to which programme position. You can also select programmes using this table.

1 From the main menu, select »Programme Table« with △+ or ▽– and press OK.
The »PROGRAMME TABLE« menu appears. (See Fig. 33)
To scroll to higher programme numbers, press ▽–.

2 To select a programme using this menu select the programme number with △+ or ▽– and press OK.
The selected programme appears.



PROGRAMME TABLE

PROG	CH	LABEL	PROG	CH	LABEL
▸ 1	C21	—·	11	C38	—·
2	C24	—·	12	C40	—·
3	C26	—·	13	C41	—·
4	C27	—·	14	C43	—·
5	C23	—·	15	C54	—·
6	C22	—·	16	C55	—·
7	C32	—·	17	C56	—·
8	C36	—·	18	C57	—·
9	C38	—·	19	C48	—·
10	C39	—·	20	C46	—·

Select ▲▼ and press OK

Fig. 33.

TIMER

To switch off the timer:
Select "OFF" in step 3.

To check the remaining time:
Press ⊙.

Using the Sleep Timer

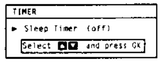
You can select a time period after which the TV automatically switches into standby mode.

1 From the main menu, select »Timer« with △+ or ▽– and press OK.
The »TIMER« menu appears. (See Fig. 34.)

2 Press OK.
The time period option changes colour.

3 Select the time period with △+ or ▽–.
The time period (in minutes) changes as follows:
10→20→30→40→50→60→70→80→90
↑———— OFF ————┘

4 After selecting the time period, press OK.
The cursor moves back to the left margin and the timer starts counting.
One minute before the TV switches into standby mode, a message is displayed on the screen.



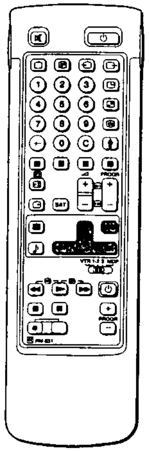
TIMER

▸ Sleep Timer (off)

Select ▲▼ and press OK

Fig. 34.

Teletext



Note:
Teletext errors may occur if the broadcasting signals are weak.

With the simple side of the Remote Commander:
You can switch teletext on and off, operate Fastext, and directly select page numbers.

TV stations broadcast an information service called Teletext via the TV channels. Teletext service allows you to receive various information pages such as weather reports or news at any time you want. For advanced teletext operation, use the buttons on the Full-Function side of the Remote Commander.

Direct Access Functions

Switching Teletext on and off

1 Select the TV channel which carries the teletext broadcast you want to watch.

2 Press ⊜ to switch on teletext.
A teletext page will be displayed (usually the index page).If there is no teletext broadcast, "No text available" is displayed on the informa-tion line at the top of the screen.

To switch teletext off
Press ○.

Selecting a teletext page

With direct page selection

Use the number buttons to input the three digits of the chosen page number.
If you have made a mistake, type in any three digits. Then re-enter the correct page number.

With page-catching

1 Select a teletext page with a page overview (e.g. index page).

2 Press OK. Using △+ or ▽–, select the desired page. "Page Catching" will be displayed on the information line. Press OK.
The requested page will appear in a few seconds.

Press ⊜ to resume normal teletext reception.

Accessing next or preceding page

Press ⊞ (PAGE +) or ⊟ (PAGE –).
The next or preceding page appears.

Superimposing the teletext display on the TV programme

- Press ⊜ once in teletext mode or twice in TV mode.
- Press ⊜ again to resume normal teletext reception.

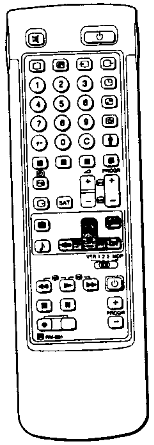
Preventing a teletext page from being updated

- Press ⊕ (HOLD). The HOLD symbol "⊕" is displayed on the information line.
- Press ⊜ to resume normal teletext reception.

Note:
Fastext operation is only possible, if the TV station broadcasts Fastext signals.

Using Fastext

With Fastext you can access pages with one key stroke.When a Fastext page is broadcast, a colour-coded menu will appear at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue buttons on the Remote Commander.
Press the corresponding coloured button on the Remote Commander which corresponds to the colour-coded menu. The page will be displayed after some seconds.



Note:
Some of the features may not be available depending on the Teletext service.

Note on Subtitles:
If the subtitles are not broadcast on page 888, please select the subtitle page using the number buttons.

Using the Teletext Menu

This TV is provided with a menu-guided teletext system. When teletext is switched on, you can use the menu buttons to operate the teletext menu. Select the teletext menu functions in the following way:

1 Press MENU. The menu will be superimposed on the teletext display. (See Fig. 35)

2 Using △+ or ▽–, select the teletext function you want and press OK. (See Fig. 36)

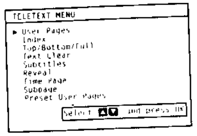


Fig. 35.

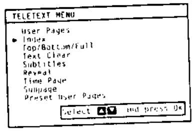


Fig. 36.

USER PAGES/PRESET USER PAGES

See page 19 for information about presetting and operating the user pages.

INDEX

The index will give you an overview of the contents of the teletext and the page numbers.

TOP/BOTTOM/FULL

For convenient reading of a teletext page, you can enlarge the teletext display with the ability to scroll up and down the screen. After having selected the function, an information line »Top/Bottom/Full« will be displayed. (See Fig. 37)

Press △+ for »Top« to enlarge the upper half. For »Bottom« keep pressing ▽–, to enlarge the lower half. Press OK for »Full« to resume the normal size.

Press ⊜ to resume normal teletext reception.

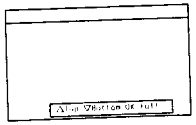


Fig. 37.

TEXT CLEAR

After having selected the function, you can watch a TV programme while waiting for a requested teletext page to be captured (The symbol changes colour) (see Fig. 38).

Press ⊜ to view the requested page.

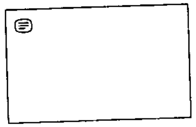


Fig. 38.

SUBTITLES

Your teletext service will inform you if a TV programme is subtitled. After having selected the function the subtitles will be displayed.

REVEAL

Sometimes pages contain concealed information, such as answers to a quiz. The reveal option lets you disclose the information. After having selected the function, an information line "REVEAL ON/OFF" will be displayed. (See Fig. 39)

Using △+ or ▽–, select ON to reveal the information or OFF to conceal it again.

Press ⊜ to resume normal teletext reception.

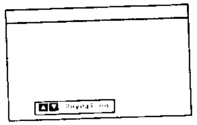


Fig. 39.

TIME PAGE

Your teletext service will inform you, if a time coded page is available. You may have a page (e.g. an alarm page) displayed at a certain time.

1 Press OK, using △+ or ▽–, select ON and press OK.

2 To select the desired page, enter the three digits of the page number using the number buttons.

To cancel the request:
Select "Subpage" and press OK.\.

If two broadcasting stations use the same Teletext:
You can preset one bank to 2 different programme positions.

3 To select the desired time, enter four digits for the desired time (e.g. 1800) using the number buttons. Press MENU. The selected time is displayed at the top in the left-handed corner. At the requested time, the page will be displayed.

SUBPAGE

You may want to select a particular teletext page from several subpages which are rotated automatically. After having selected the function, an information line will be displayed.

To select the desired subpage, enter four digits using PROGR+/– or the number buttons. (e.g. enter 0002 for the second page of a sequence).

User Page Bank System

You can store up to 30 pages in the "Teletext page bank system". In this way you have quick access to the pages you watch frequently.

Storing pages

There are 5 "banks" (A to E) for 5 teletext stations. In each bank you can store 6 preferred pages (P1 to P6).

1 Press ⊜ (if Teletext is not on already) and MENU to show the TELETEXT MENU display.

2 Select »PRESET USER PAGES« with △+ or ▽– and press OK.

3 Select the desired bank with △+ or ▽– and press OK. The cursor will go to the first position (P1) of the preferred pages.

4 Input the three digits of your first preferred page with the number buttons and press OK.
The cursor will go to the second position.

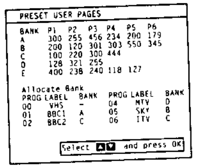
5 Repeat step 4 for the other 5 page numbers you want to preset. If you do not want to preset all 6 page numbers available, press OK without inserting any number. After having finished the presetting press OK repeatedly until the cursor appears besides the next bank at the left margin.

6 Select »Allocate Bank« with △+ or ▽– and press OK.

7 Select the programme position for which you have preset pages with △+ or ▽– and press OK. (See Fig. 40)

8 Select the desired bank with △+ or ▽– (Banks A to E are available) and press OK.

9 Repeat steps 3 to 8 for the other 4 banks available.



PRESET USER PAGES

BANK	P1	P2	P3	P4	P5	P6
A	300	255	456	234	200	179
B	200	120	301	303	550	345
C	100	220	300	444		
D	128	321	255			
E	400	238	240	118	127	

Allocate Bank

PROG	LABEL	BANK	PROG	LABEL	BANK
00	VHS	–	04	MTV	D
01	BBC1	A	05	SKY	B
02	BBC2	C	06	ITV	C

Select ▲▼ and press OK

Fig.40.

Displaying User Pages

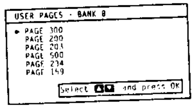
1 Select MENU.

2 Select »User Pages« with △+ or ▽– and press OK.
A table of the stored preferred pages will be displayed.
(See Fig. 41)

3 Select the desired page with △+ or ▽– and press OK. The page will be displayed after some seconds.

You can use the coloured buttons on the Remote Commander to have quick access to the first four User pages. Page 1 corresponds to the red button, P 2 to the green one, P 3 to the yellow one and P 4 to the blue button.

To select the desired page press the respective coloured button while you are in TV mode. Now the Page number of this teletext page will appear in white at the top in the left-handed corner of the TV screen. When the page number changes colour, the page is available. Press the coloured button again to display the page.



USER PAGES · BANK B

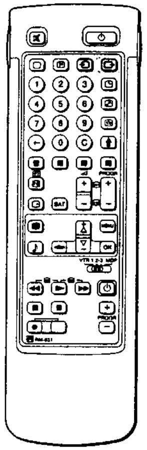
- ● PAGE 300
- PAGE 200
- PAGE 203
- PAGE 500
- PAGE 234
- PAGE 149

Select ▲▼ and press OK

Fig. 41.

Connecting and Operating Optional Equipment

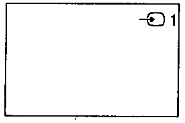
Selecting input with PROGR +/– or number buttons
You can preset video input sources to the programme positions so that you can select them with PROGR +/– or number buttons.
For details, see "Preset channels manually" on page 34.



Selecting input and output

This section explains how to view the video input picture (of the video source connected to your TV), and how to select the output signal using direct access buttons or the menu system.

Selecting input



Press →⊖ repeatedly to select the input source.

The symbol of the selected input source will appear.

To go back to the normal TV picture

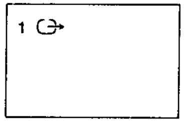
Press ▢.

Input modes

Symbol	Input signal
→⊖ 1	Audio/video input through the →⊖ 1 connector
→⊖	RGB input through the →⊖ 1 connector
→⊖ 2	Audio/video input through the ⊖→2/→Ⓢ2 connector
→Ⓢ 2	S video input through the ⊖→2/→Ⓢ2 connector
→⊖ 3	Audio/video input through →⊖3 and →⊖3 on the front
→Ⓢ 3	S video input through the →Ⓢ3 connectors on the front (4-pin connector)

You can also select the input mode using the P→⊿→⊖ and –/+ buttons on the TV. In this case, first select →⊖, and then press –/+ buttons to select the input.

Selecting the output



The ⊖→2/→Ⓢ2 connector outputs the source input from the other connectors.

Press ⊖→ repeatedly to select the output.
The symbol of the selected output source appears.

Output modes

Symbol	⊖→2/→Ⓢ2 connector outputs
1 ⊖→	The audio/video signal from the →⊖ 1 connector
2 ⊖→	The audio/video signal from the ⊖→2/→Ⓢ2 connector
2 Ⓢ→	The audio/S video signal from the ⊖→2/→Ⓢ connector
3 ⊖→	The audio/video signal from the →⊖3, →⊖3 connectors
3 Ⓢ→	The audio/S video signal from the →Ⓢ3, →⊖3 connectors
TV⊖→	The audio/video signal from the ⊤⊤ aerial terminal

Checking and selecting the input and output sources using the menu

You can display the menu to see which input sources are selected for the TV screen, and which output source is selected. You can also select them on the menu display.

1 Select »Video Connection« with △+ or ▽– and press OK. The »VIDEO CONNECTION« menu appears. (See Fig. 42)

You can see which source is selected for the TV and for the output. If you want to select the input and output on this menu, go on to the next step.

2 Select TV Screen (input source for the TV screen) or output (output source) with △+ or ▽– and press OK. One of the source items changes colour. (See Fig. 43)

3 Select the desired source with △+ or ▽–.
(See Fig. 44)
For details about each source, see the table on page 47.

4 Press OK.

The selected source is confirmed, and the cursor appears. (See Fig. 45)

5 Repeat steps 2 to 4 to select the source for other inputs or outputs.

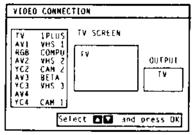


Fig. 42.

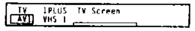


Fig. 43.

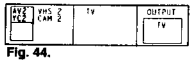


Fig. 44.

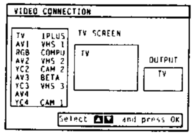


Fig. 45.

Remote Control of Other Sony Equipment

You can use the TV Remote Commander to control most Sony remote-controlled video equipment such as: Beta, 8mm or VHS VTRs or video disc players.

Tuning the Remote Commander to the equipment

1 Set the VTR 1/2/3 MDP selector according to the equipment you want to control:

VTR 1: Beta or ED Beta VTR

VTR 2: 8mm VTR

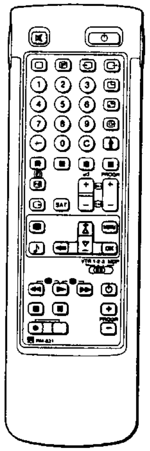
VTR 3: VHS VTR

MDP: Video disc player

2 Use the buttons indicated in the illustration to operate the additional equipment.

If your video equipment is furnished with a COMMAND MODE selector: set this selector to the same position as the VTR 1/2/3 MDP selector on the TV Remote Commander.

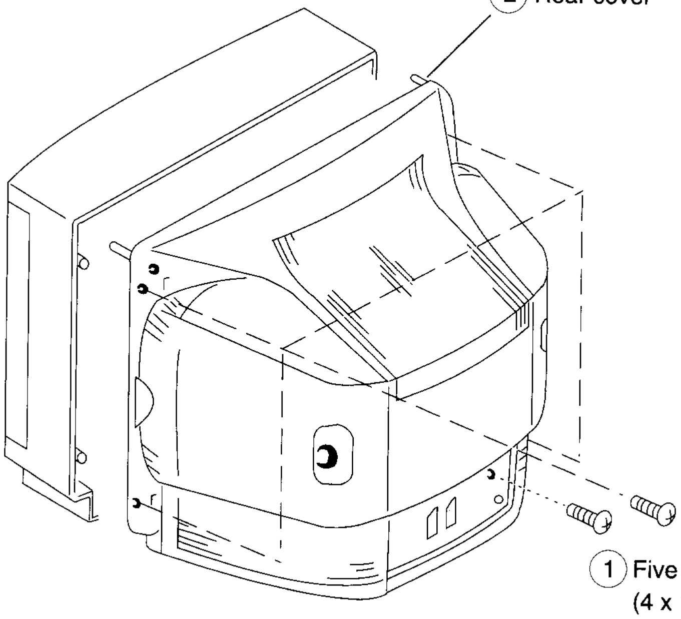
If the equipment does not have a certain function, the corresponding button on the Remote Commander will not operate.



When recording
When you use the ● (record) button, make sure to press this button and the one to the right of it simultaneously.

SECTION 2
DISASSEMBLY

2-1. REAR COVER REMOVAL

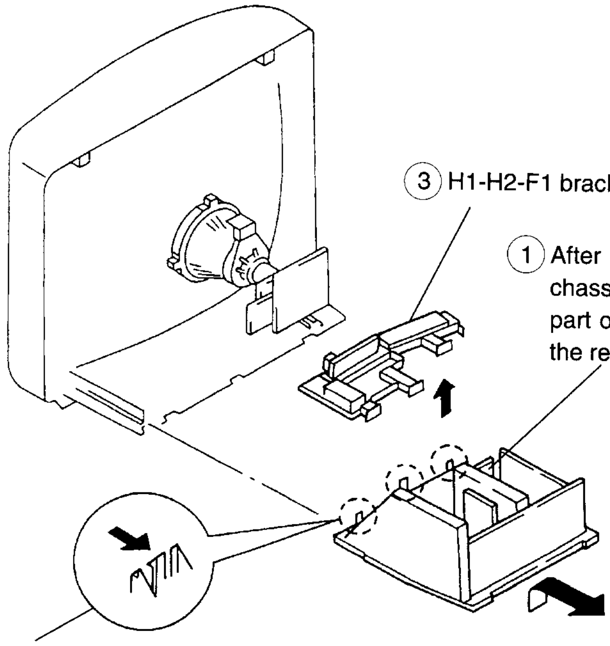


② Rear cover

① Five BV tapping screws
(4 x 16)

2-2. CHASSIS ASSY REMOVAL

* Remove the connector braket and then perform the following servicing.
(refer to 2-3. CHASSIS ASSY REMOVAL.)

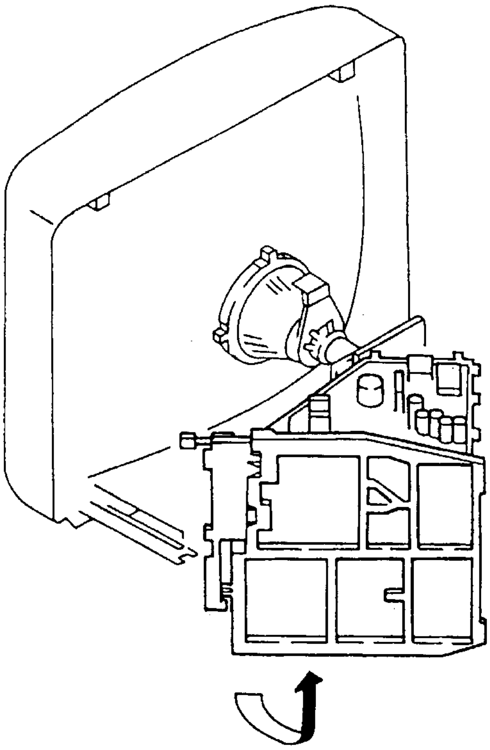


③ H1-H2-F1 bracket

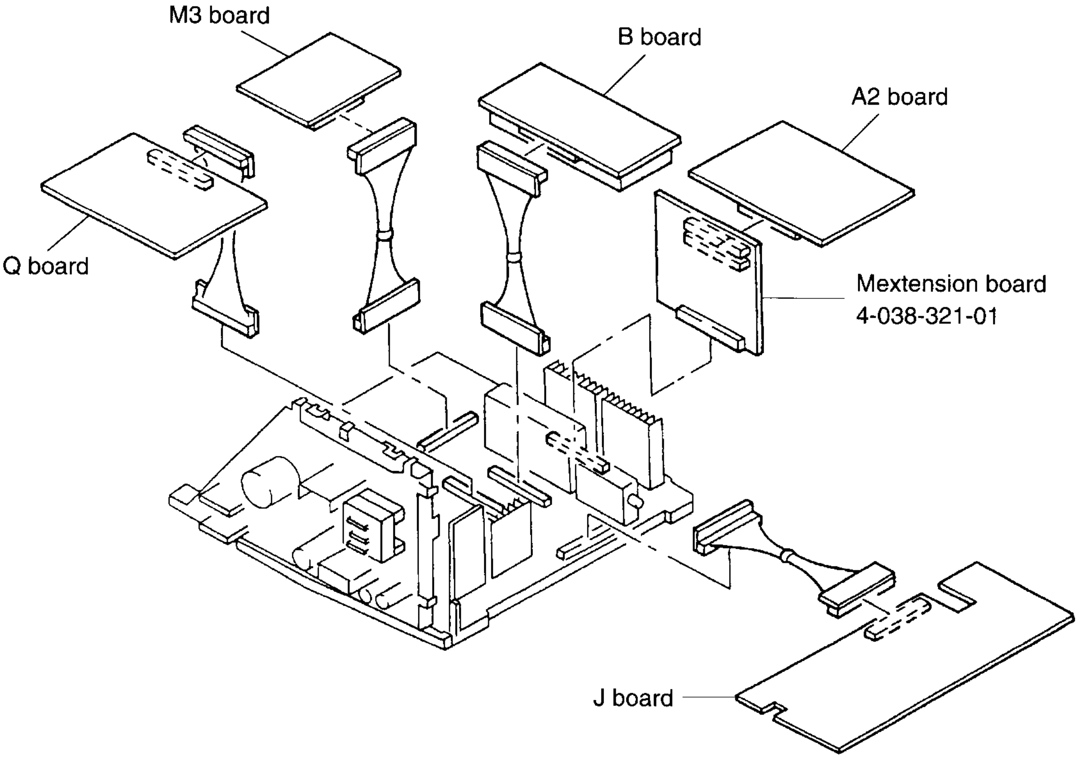
① After the assembly of the main chassis, lift and pull out the rear part of the main chassis toward the rear.

② Push the three claws of the main chassis in the direction of the arrow and remove the H1-H2-F bracket upwards.

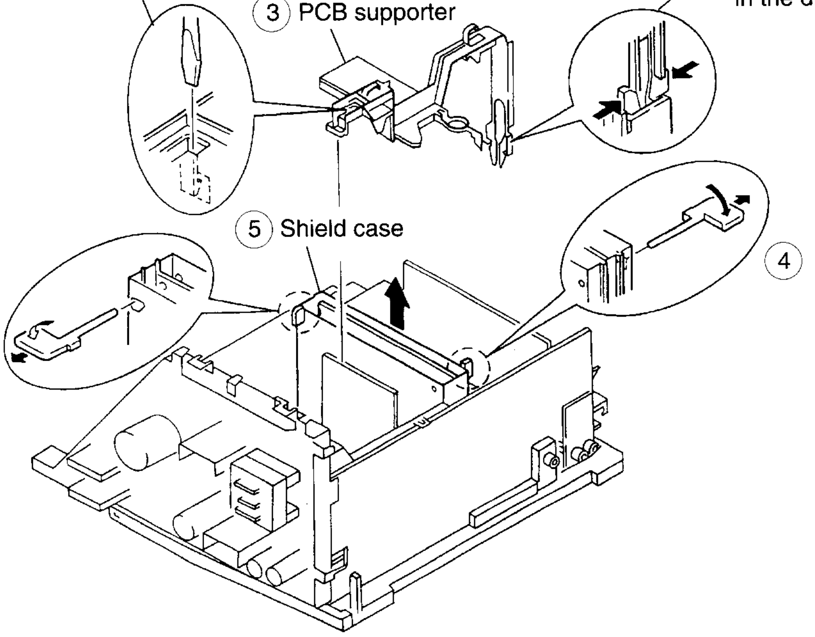
2-3. SERVICE POSITION



2-4. EXTENSION BOARD


M3 board
B board
A2 board
Q board
Mextension board
4-038-321-01
J board

2-5. PCB SUPPORTER AND SHIELD CASE REMOVAL



① Insert ⊖ driver from sqaure hole and remove the claw.

② Pull up while pushing both sides in the direction of the arrow.

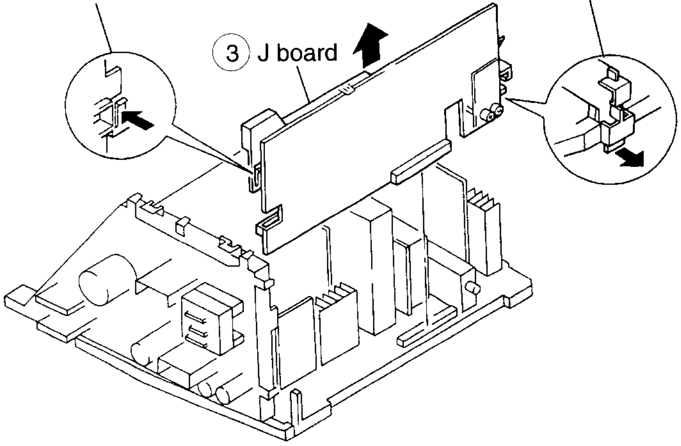
③ PCB supporter

④ Lay the key 90° and pull out.

④

⑤ Shield case

2-6. J BOARD REMOVAL

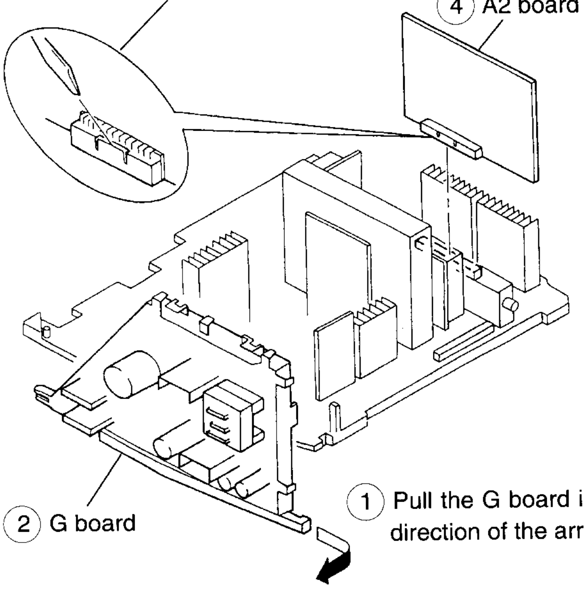


① Push the claw in the direction of the arrow and remove.

② Pull the claw of the bracket in the direction of the arrow and remove.

③ J board

2-7. G AND A2 BOARDS REMOVAL



① Pull the G board in the direction of the arrow.

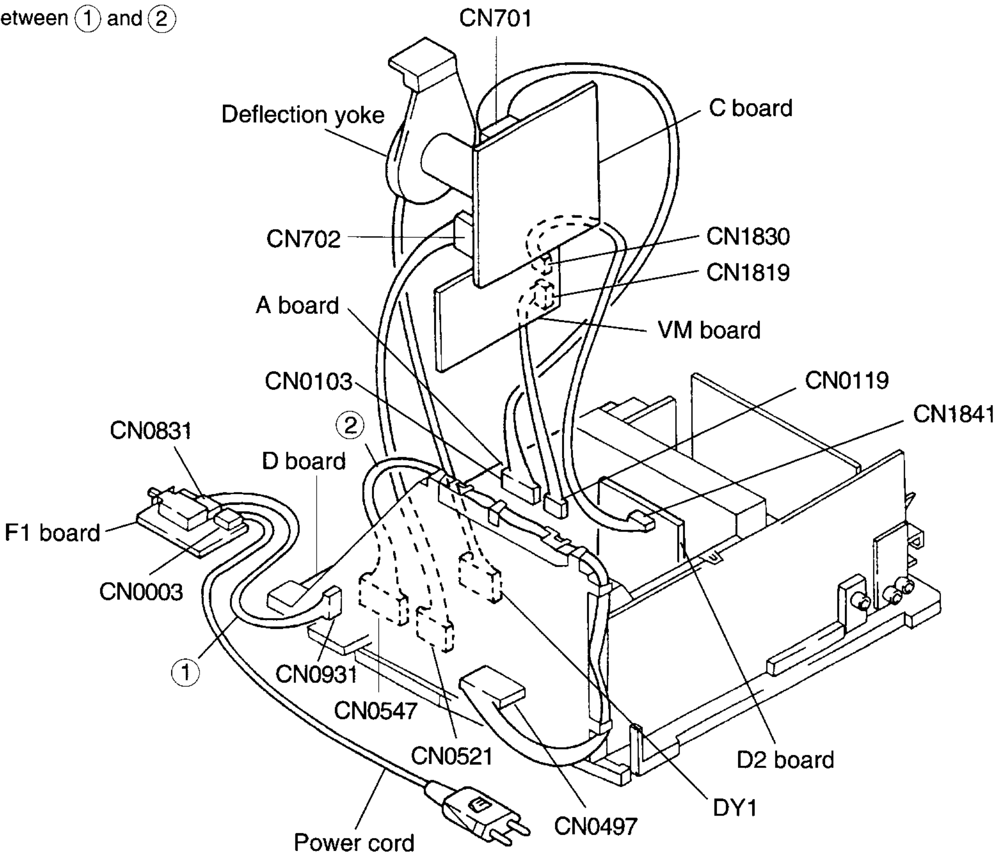
② G board

③ Insert ⊖ driver to the claw of the connector and remove

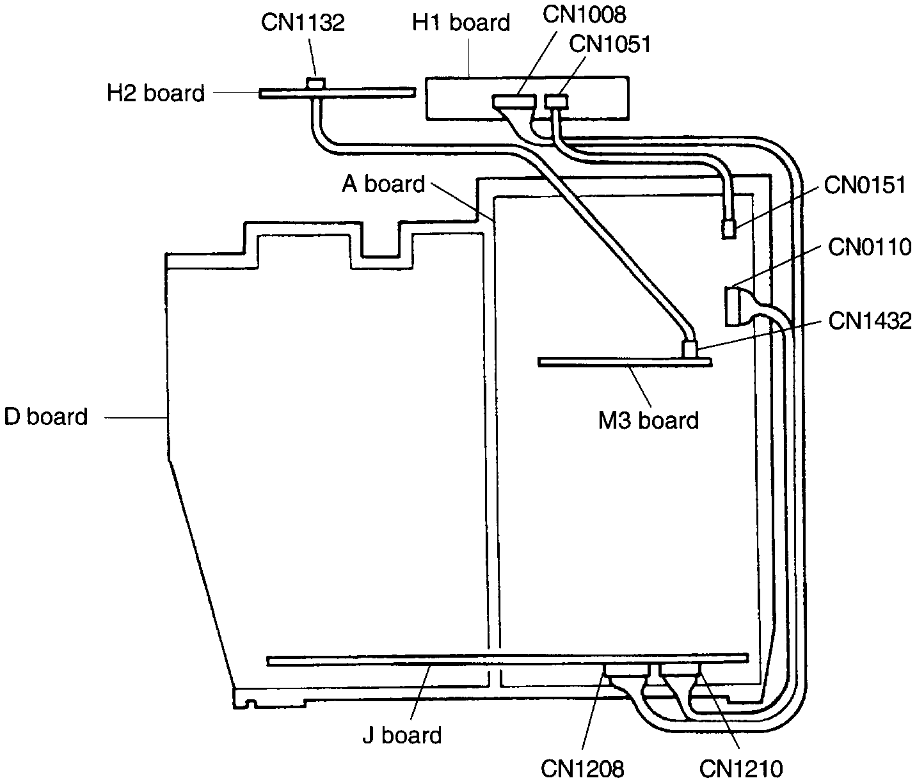
④ A2 board

2-8-1. WIRE DRESSING

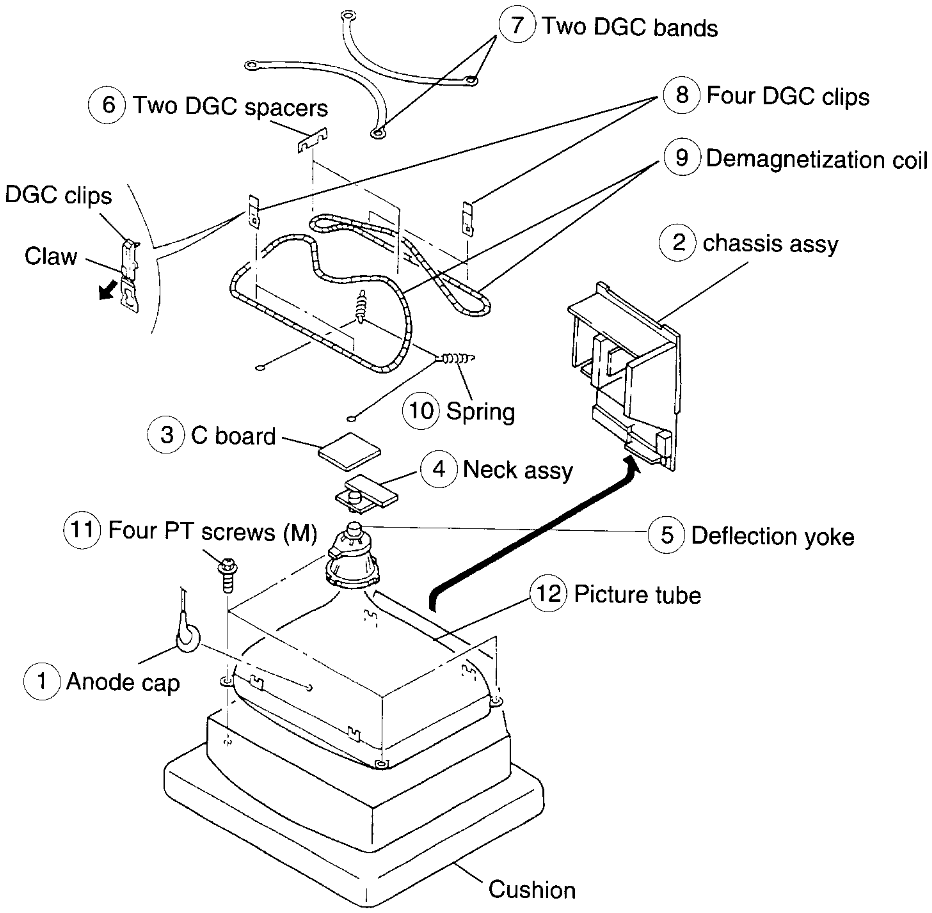
- Keep distance between ① and ②


CN701
Deflection yoke
C board
CN702
CN1830
CN1819
A board
VM board
CN0103
CN0119
CN1841
CN0831
②
D board
F1 board
CN0003
①
CN0931
CN0547
CN0521
D2 board
DY1
CN0497
Power cord

2-8-2. WIRE DRESSING


CN1132
H1 board
CN1008
CN1051
H2 board
A board
CN0151
CN0110
CN1432
D board
M3 board
J board
CN1208
CN1210

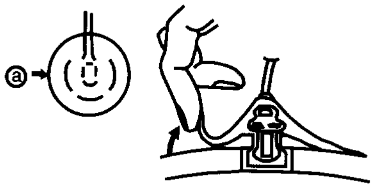
2-9. PICTURE TUBE REMOVAL


⑦ Two DGC bands
⑥ Two DGC spacers
⑧ Four DGC clips
⑨ Demagnetization coil
DGC clips
Claw
② chassis assy
⑩ Spring
③ C board
④ Neck assy
⑪ Four PT screws (M)
⑤ Deflection yoke
⑫ Picture tube
① Anode cap
Cushion

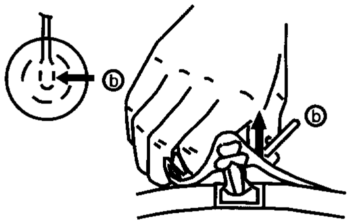
• REMOVAL OF ANODE-CAP

Note: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

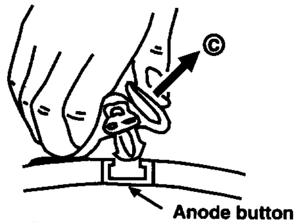
*** REMOVING PROCEDURES.**



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ



② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ


ⓒ
Anode button

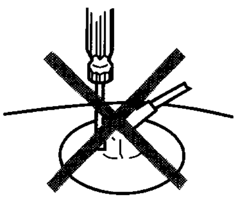
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ

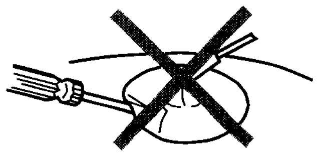
• HOW TO HANDLE AN ANODE-CAP

① Don't damage the surface of anode-cap with sharp shaped material !

② Don't press the rubber hardly not to hurt inside of anode-caps !
A metal fitting called as shatter-hook terminal is built into the rubber.

③ Don't turn the foot of rubber over hardly !
The shatter-hook terminal will stick out or damage the rubber.





SECTION 3
SET - UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to these settings :

◑ Contrast 80%
(or remote control normal)
☼ Brightness 50%

- Carry out the following adjustments in this order :

1. Beam landing
2. Convergence
3. Focus
4. White balance

Note: Testing equipment required.
1. Color bar/pattern generator
2. Degausser
3. DC power supply
4. Digital multimeter
5. Oscilloscope

Preparation:

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input the white signal with the pattern generator.
   CONTRAST } normal
   BRIGHTNESS }
2. Position neck assy as shown in Fig.3-2.
3. Set the pattern generator raster signal to red.
4. Move the deflection yoke forward and adjust with the purity control so that the red is at the center and the blue and the green take up equally sized areas on each side. (See Fig. 3-1 - 3-3)
5. Move the deflection yoke forward and adjust so that the entire screen becomes red. (See Fig. 3-1)
6. Switch the raster signal to blue, then to green and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it. (See Fig. 3-4)

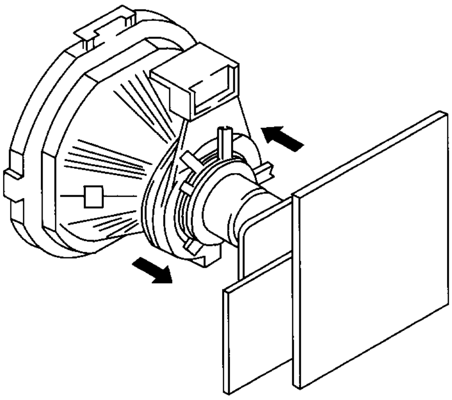


Fig. 3-1

Fig. 3-2

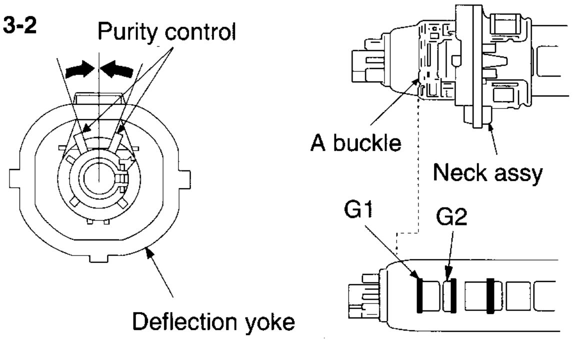
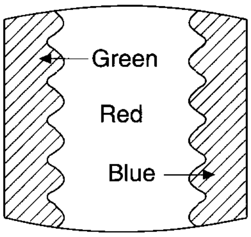

Purity control
A buckle
Neck assy
G1
G2
Deflection yoke

Fig. 3-3


Green
Red
Blue

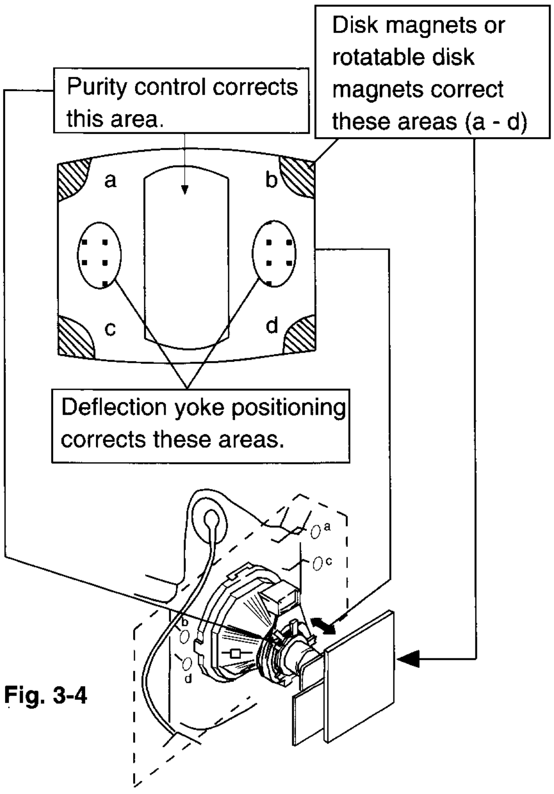

Disk magnets or rotatable disk magnets correct these areas (a - d)
Purity control corrects this area.
a
b
c
d
Deflection yoke positioning corrects these areas.
a
c
b
d

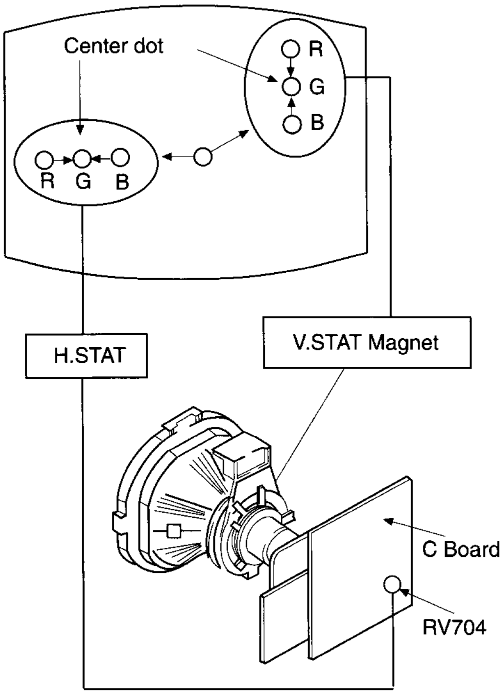
Fig. 3-4

3-2. CONVERGENCE

Preparation:

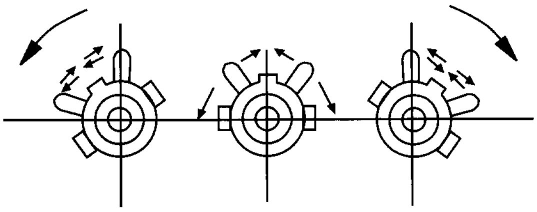
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide a dot pattern.

(1) Horizontal and vertical static convergence

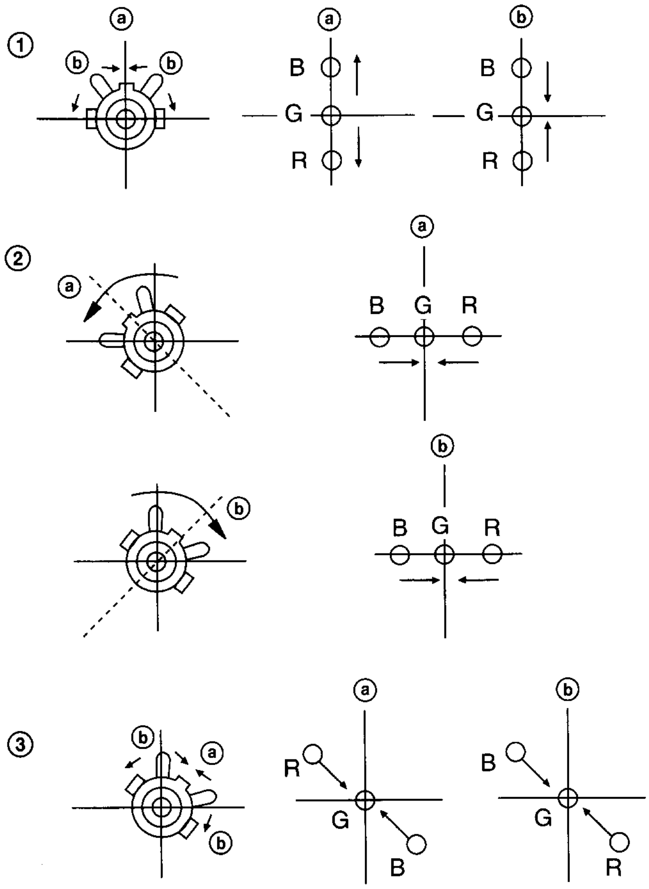


1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green, and blue points together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
   (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other)

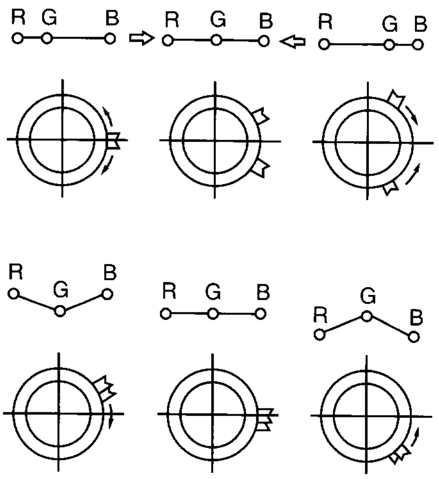
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.



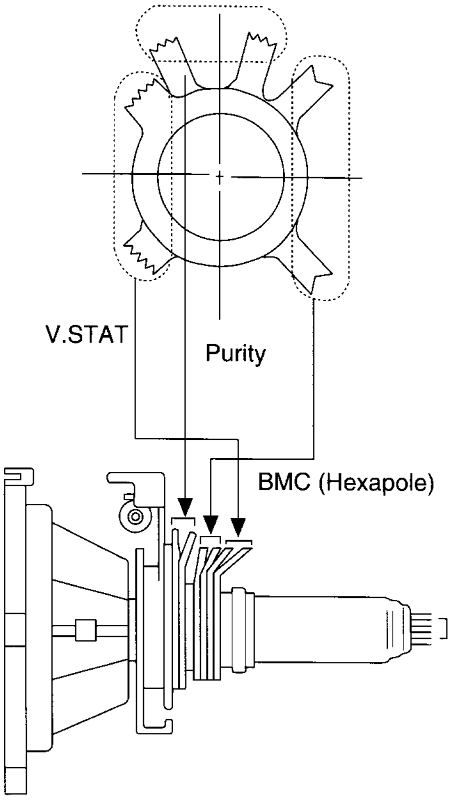
4. If the V.STAT magnet is moved in the direction of the ⓐ and ⓑ arrows, the red, green, and blue points move as shown below.



- Operation of BMC (Hexapole) Magnet

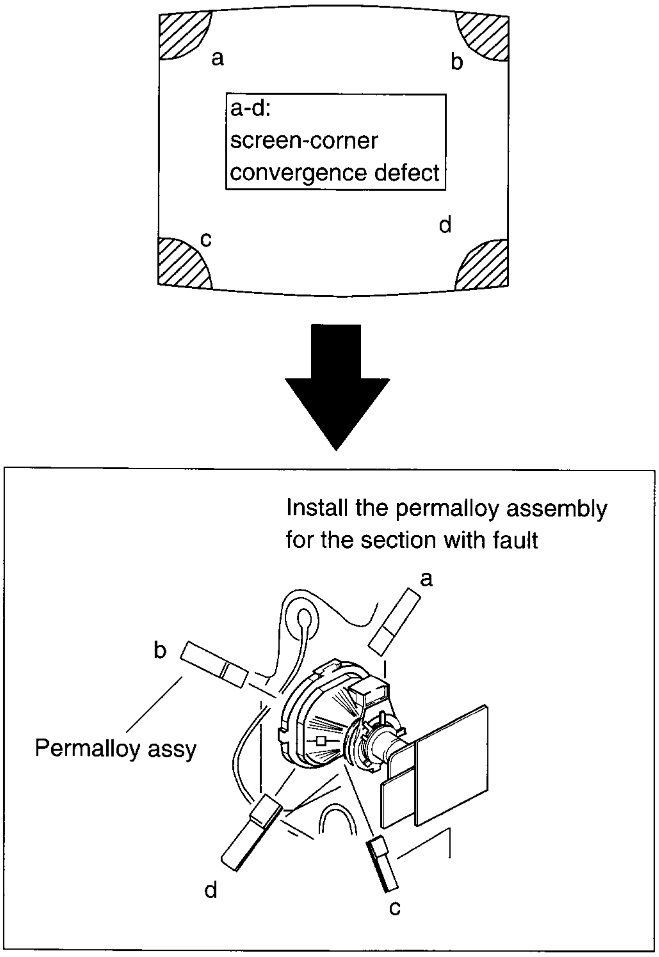

R G B
R G B
R G B
R G B
R G B
R G B

- The respective dot position resulting from moving each magnet interact, so be sure to perform adjustment while tracking.
  Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the center of the screen (by moving the dots in the horizontal direction).


V.STAT
Purity
BMC (Hexapole)

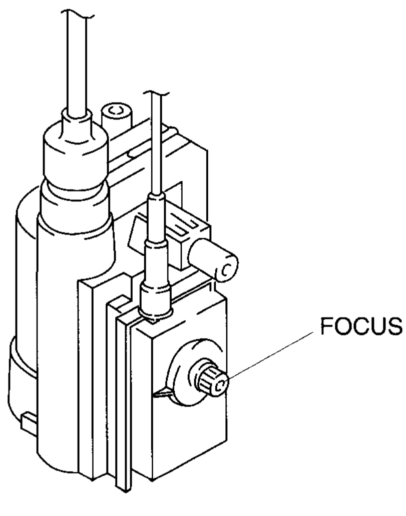
(2) Screen corner convergence.

If you are unable to adjust the corner convergence properly, correction is possible by the use of permalloy assemblies.


a
b
a-d:
screen-corner
convergence defect
c
d
Install the permalloy assembly
for the section with fault
a
b
Permalloy assy
d
c

3-3. Focus

Adjust the focus to optimize the screen.



3-4. WHITE BALANCE

White balance adjustment

1. Receive an all-white signal.
2. Enter into service mode. (Refer to the section 4 "Electrical Adjustment" on how to enter service mode.)
3. Select TDA4780 on menu.

Item No.	Adjustment item	Data Amount
01	BRIGHT	31
02	COLOR	31
03	PICT	52
04	HUE	31
05	R GAIN	31
06	G GAIN	ADJ.
07	B GAIN	ADJ.
08	R LEVEL REF	ADJ.
09	G LEVEL REF	ADJ.
10	B LEVEL REF	ADJ.
11	PEAK DRV LIMIT	36
12	GAMMA	31
13	SANDCASTLE 2 LEVEL-5	ON
14	DELOF	OFF
15	DATA BUFFER	OFF

Select 4 $ and press OK.

4. Set picture to MAX.
5. Adjust G-DRIVE, B-DRIVE with ▲ , ▼ buttons so that the white balance becomes optimum.
6. Press OK button to write the data for each item.
7. Set picture to MIN.
8. Adjust R LEVEL REF, G LEVEL REF, and B LEVEL REF with ▲ , ▼ buttons so that the white balance becomes optimum.
9. Press OK button to write the data for each item.

SECTION 4
CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander RM-831.

HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch of the set. Then press the button ⏻ on the remote commander twice.

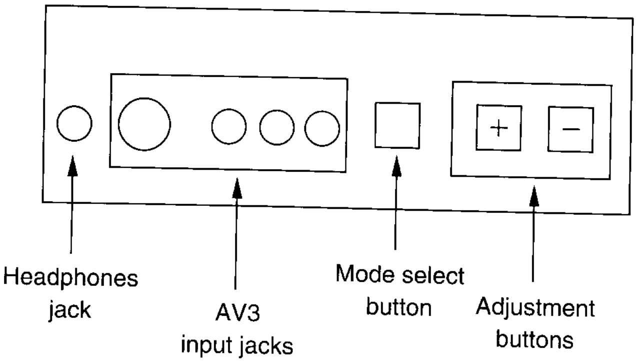

+
−
Headphones jack
AV3 input jacks
Mode select button
Adjustment buttons

Fig.4-1

2. "TT" will appear at the upper right corner of the screen.

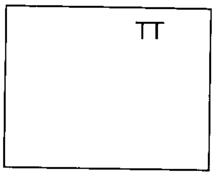


Fig.4-2

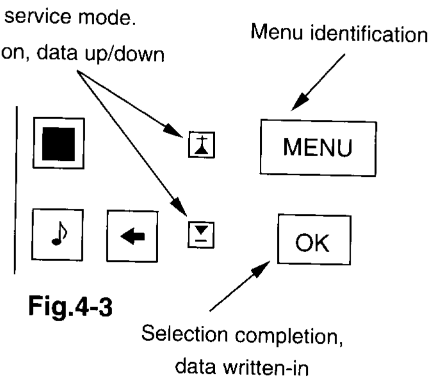
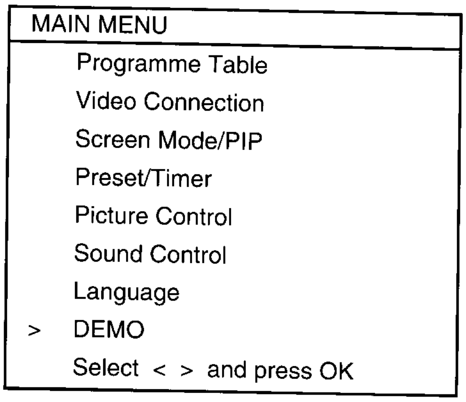

Command operation in service mode.
Item selection, data up/down
Menu identification
MENU
OK
Selection completion, data written-in

Fig.4-3

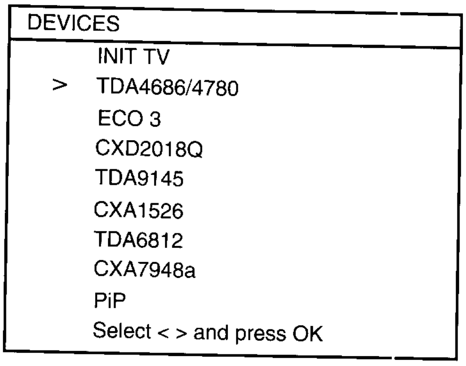
3. Press the MENU button on the remote commander to obtain the menu on the screen.



MAIN MENU
Programme Table
Video Connection
Screen Mode/PIP
Preset/Timer
Picture Control
Sound Control
Language
> DEMO
Select < > and press OK

Fig.4-4

4. Press the ▲ and ▼ buttons on the remote commander and move > to DEMO.
5. Press OK button to proceed to the next menu.
6. The menu of Fig. 4-5 will appear on the screen. Select the DEVICE corresponding to the adjustment item from the table on the next page.



DEVICES
INIT TV
> TDA4686/4780
ECO 3
CXD2018Q
TDA9145
CXA1526
TDA6812
CXA7948a
PiP
Select < > and press OK

Fig 4-5

7. If adjustment item is TDA4780, press the ▼ button and move > to TDA4780.

TDA4780

Item No.	Adjustment item	Data Amount
> 01	BRIGHT	31
02	COLOR	31
03	PICT	52
04	HUE	31
05	R GAIN	41
06	G GAIN	38
07	B GAIN	31
08	R LEVEL REF	31
09	G LEVEL REF	31
10	B LEVEL REF	31
11	PEAK DRV LIMIT	36
12	GAMMA	31
13	SANDCASTLE 2 LEVEL-5	ON
14	DELOF	OFF
15	DATA BUFFER	OFF

Select ▲▼ and press OK.

8. Press OK button to get the next selection menu.
9. Press ▼ button and move > to the adjustment item and press OK button.
10. Press ▲ and ▼ buttons to change the data in order to comply with each standard.
11. Press OK button to write data.
12. Turn off the power to quit service mode when adjustments are completed.

TDA4780

Item No.	Adjustment item	Data Amount
01	BRIGHT	31
02	COLOR	31
03	PICT	52
04	HUE	31
05	R GAIN	41
06	G GAIN	38
07	B GAIN	31
08	R LEVEL REF	31
09	G LEVEL REF	31
10	B LEVEL REF	31
11	PEAK DRV LIMIT	36
12	GAMMA	31
13	SANDCASTLE 2 LEVEL-5	ON
14	DELOF	OFF
15	DATA BUFFER	OFF
16	NTSC MATRIX	OFF
17	HDTV	OFF
18	FSBL	OFF
19	AUTO CUT OFF	ON
20	FSW 2 DISABLE	OFF
21	FSW 2	OFF
22	FSW 1 DISABLE	OFF
23	FSW 1	OFF
24	ADAPTIVE BLACK	OFF
25	Y HIGH 1V	OFF
26	MOD 2	OFF
27	BLUE STRETCH	OFF
28	VM OUT	ON
29	PEAK DRV ABSOLUTE	ON
30	TIME CNST PEAK LIMIT	OFF
31	No selection	OFF
32	SUB BRIGHT	-5
33	SUB COLOR	0

CXD2018Q

Item No.	Adjustment item	Data Amount
01	V SIZE	ADJ.
02	V SHIFT	ADJ.
03	S CORRECTION	ADJ.
04	V LINEARITY	ADJ.
05	H SIZE	ADJ.
06	PIN AMP	ADJ.
07	TILT	ADJ.
08	UPPER CORNER	ADJ.
09	LOWER CORNER	ADJ.
10	V BOW	ADJ.
11	ANGLE	ADJ.
12	HV COMP. V	13
13	HV COMP. H	8
14	FRAME SHIFT	OFF
15	FREE RUN 60 Hz	OFF
16	SYSTEM 60 Hz	OFF
17	ASPECT WIDE	OFF
18	DOUBLE SCAN	OFF
19	INTERLACE	ON
20	H SHIFT	32

Typical On Screen Display based values when receiving PAL Phillips pattern.

TDA6812	ADJ.
Stereo-Separation	(30)

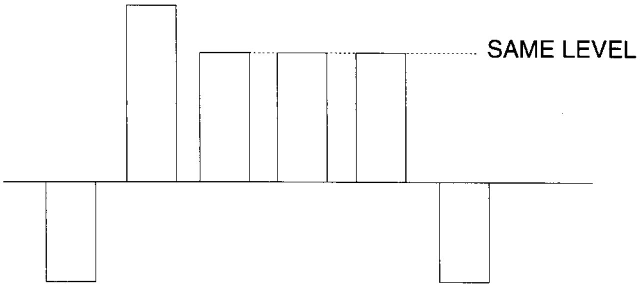
Should be adjusted twice 4 : 3 and 16 : 9 mode.

SUB BRIGHTNESS ADJUSTMENT

1. Input a Phillips pattern.
2. Enter into service mode and press 23.
3. Adjust data so that 0-IRE of grey scale and CUT-OFF 20-IRE are only slightly visible on screen.

SUB COLOR ADJUSTMENT

1. Input a PAL color bar signal.
2. Connect an oscilloscope to pin ③ (B) of CN0403 on the C board.
3. Enter into service mode and press 33 of TDA4780, SUB COLOR.
4. Adjust data so that the right sides of the waveform are at the same level.



B-OUT WAVEFORM

STEREO-SEPARATION ADJUSTMENT

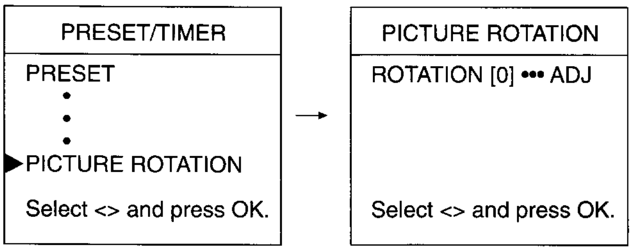
1. Input a 1kHz stereo signal to the L-ch and a 400Hz stereo signal to the R-ch.
2. Enter into service mode.
3. Adjust data so that sound is not detected in the R-ch and the L-ch.

DRIVE AND CUT OFF

See direct test mode list attached and refer to sub brightness or such for adjustment method.

PICTURE ROTATION

1. Input a PAL color bar signal.
2. Enter into service mode.
3. Press the MENU button of the commander to get the menu on screen.
4. Press the ▲ and ▼ buttons on the commander and move > to PRESET/TIMER.



PRESET/TIMER

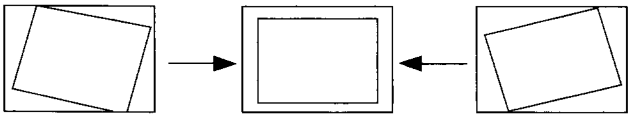
PRESET
•
•
•
▶PICTURE ROTATION

Select <> and press OK.

PICTURE ROTATION

ROTATION [0] ••• ADJ

Select <> and press OK.



BELL FILTER ADJUSTMENT (L3, L2)

1. Input PHILLIPS Signal.
2. Connect an oscilloscope to pin ⑮ of IC1 on the E2 board.
3. Adjust L3 (Bell Filter) to get a flat chroma/smooth signal see (Fig.4-6).
4. Connect an oscilloscope to pin ② of IC1 on the E2 board.
5. Adjust L2 (B – Y) to get symmetrical transient between (R – Y) → (B – Y) and (B – Y) → (R – Y) see (Fig.4-7).
6. Connect pin ⑤ of CN2.
7. Confirm ID flip-flop output signal is as indicated in (Fig.4-8).

Fig. 4-6 < MONITOR PIN ⑮ of IC1 Connect

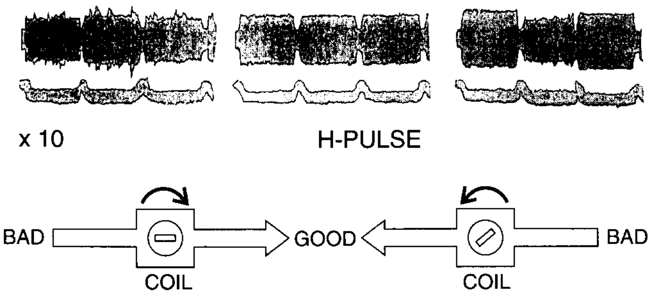
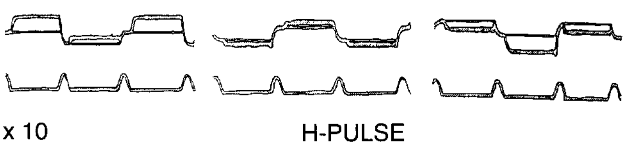


Fig. 4-7 < MONITOR PIN ② of IC1 Connect



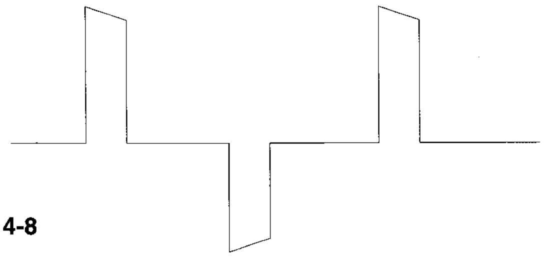


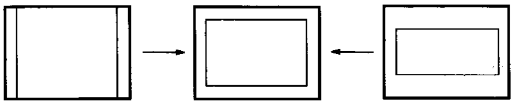
Fig. 4-8

DEFLECTION SYSTEM ADJUSTMENT

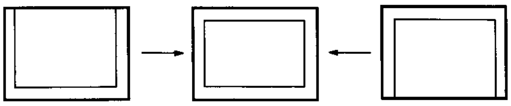
1. Enter into service mode and select CXD2018Q.
2. Select and adjust each item in order to obtain the optimum image.

Item No.	Adjustment item	Data Amount
01	V SIZE	ADJ.
02	V SHIFT	ADJ.
03	S CORRECTION	ADJ.
04	V LINEARITY	ADJ.
05	H SIZE	ADJ.
06	PIN AMP	ADJ.
07	TILT	ADJ.
08	UPPER CORNER	ADJ.
09	LOWER CORNER	ADJ.
10	V BOW	ADJ.
11	ANGLE	ADJ.
12	HV COMP. V	13
13	HV COMP. H	8
14	FRAME SHIFT	OFF
15	FREE RUN 60 Hz	OFF
16	SYSTEM 60 Hz	OFF
17	ASPECT WIDE	OFF
18	DOUBLE SCAN	OFF
19	NON INTERLACE	ON
20	H SHIFT	ADJ.
21	NS CORRECT 2R	ADJ.

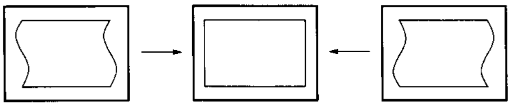
V SIZE



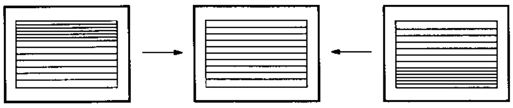
V SHIFT



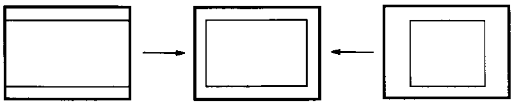
S CORRECTION



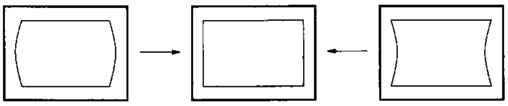
V LINEARITY



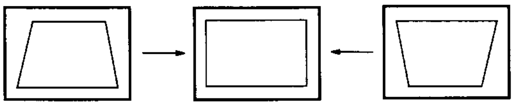
H SIZE



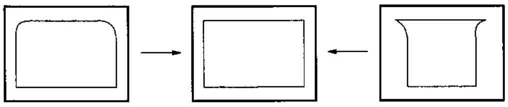
PIN AMP



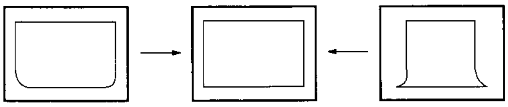
TILT



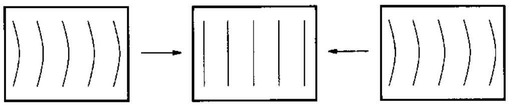
UPPER CORNER



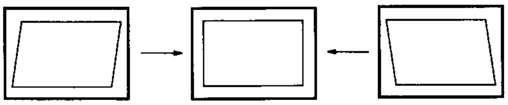
LOWER CORNER



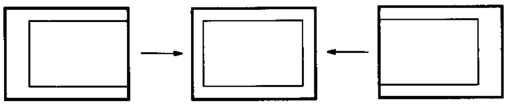
V BOW



ANGLE



H SHIFT

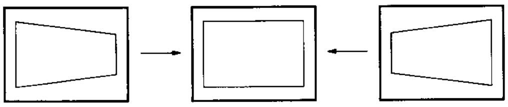


3. Press OK button to write data.

If the menu display prevents accurate adjustment, press to clear, to resume, press once again.

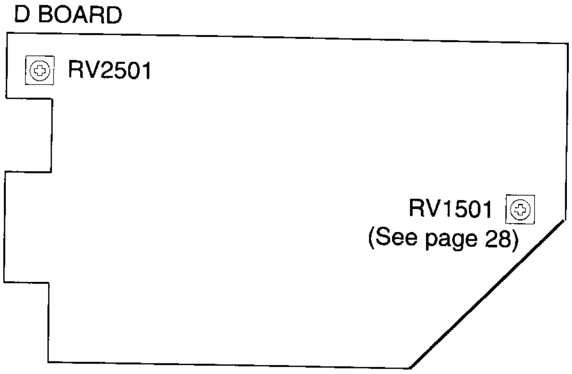
N/S CORRECT (RV1501)

(Adjust RV1501)

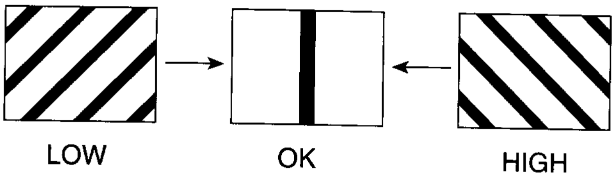


4-2. VOLUME ELECTRICAL ADJUSTMENTS

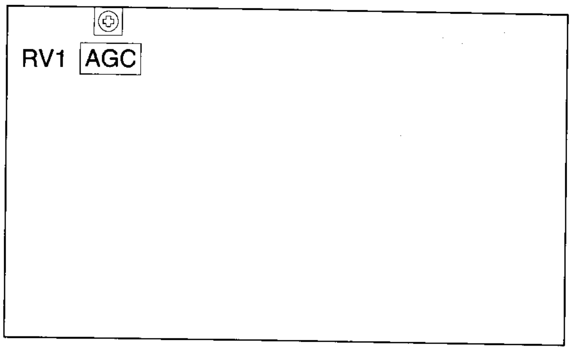
H-FREQ ADJUSTMENT (RV2501)


D BOARD
RV2501
RV1501
(See page 28)

1. Input a Phillips pattern.
2. Add a 100μF 16V capacitor in parallel with R2503, to make a free running condition.
3. Adjust RV2501 to obtain frequency of 31.25Hz ± 50Hz.

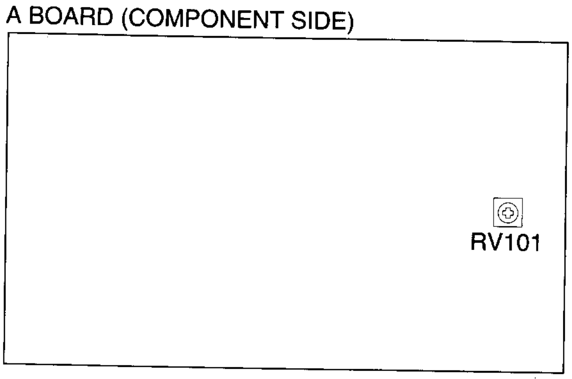


AGC ADJUSTMENT (IF BLOCK)



1. Receive an off-air signal.
2. Adjust the AGC RV1 so that there is no snow noise or cross-modulation visible on the screen.
3. Change the receiving channel and confirm status.

DET OUT ADJUSTMENT (RV101)


A BOARD (COMPONENT SIDE)
RV101

1. Input a Phillips pattern
2. Adjust RV101 so that 1.0Vp-p can be obtained at pin ⑤ of CN0109 on the (A BOARD).

4-3. TEST MODE 2 :

Is available by pressing Test button twice, OSD 'TT' appears. The functions described below are available by pressing the two numbers. To release the Test Mode 2, press 0, 10, or 20 twice ... or switch the TV into Stand-by Mode.
Pressing the two local controls (+ and -) during Power ON will also switch into "TT" mode.

In TT mode, it is possible to remove the menu from the screen by pressing the Speaker OFF button. By pressing the Speaker OFF button a second time the menu will reappear. The function is kept even when the menu is not displayed !!.

00	Switch TV back in nomal mode - TT mode off
01	Direct access to Picture maximum
02	Direct access to Picture minimum
03	Set the Volume to 35% (Production request)
04	Set the Volume to 50% (Production request)
05	Set the Volume to 65% (Production request)
06	Set the Volume to 80% (Production request)
07	no function
08	Shipping Condition (Production request) To ensure that all TV sets leave the Production with the same presettings. Programme 1 is selected, AAV IN is set to AV1, AV Out is set to TV Out, Volume and HP Volume is set to 35%. Resolution is set to high. Format is set to 4:3. Pip is set to Top Left position,. Pip is switched off. TT mode is switched off, all analogue values are set to the reset setting (factory setting).
09	Language reset (Production request) With this function the "Language Byte" in the NVM (Bank 0AAH Adress 0DCH) is erased (set to 0FFH). The Language Menu appears now automatically when the TV set is switched ON as long as no new language is selected.
10	The TT number will be deleted. All numbers with 0 (10, 20, 30, 40) will reset the TT number. A new number can be selected. TT display is kept.
11	Direct access to Balance (Production request) With Cursor Up/Down the Balance can be controlled (w/o OSD, Menu display).
12	Direct access to Hue (Production request) With Cursor Up/Down the Balance can be controlled (w/o OSD, Menu display).
13	Display of Software Version and TV set configeration.
14	Adjustment of N/S Correction
15	Read Factory setting from ROM (Programme Code) and store this data at Last Power Memory data location. (The previous last power memory data is overwritten). (For Service). AE-2F has 3 packages of Analogue datas: 1. Last Power Memory dta. This data is send continiously to the corresponding IC's (TDA9145, TDA6812) with this data the TV picture/sound appears. 2. Reset data. By pressing "Reset" in menu this data is transfered from Reset Data location to the Last Power data location in NVM. That means the previous Last Power Memory Data is overwritten by the Reset data. Last Power memory and Reset data are now the same. 3. Factory fixed data. In the ROM Code of micro processor are also analogue datas which are fixed (ROM can't be changed).
16	Save actual Last Power Memory data at Reset Data location (the previous Reset data is overwritten) (For Service)
15/16	With these two functions, it is possible to preset user defined Reset values (just TT 16) or to preset factory defined Reset values (first TT 15 then TT 16).
17	This function presets the Labels for the AV sources: The Labels are AV1, RGB, AV2, YC2, AV3, VC3, AV4 and VC4. (Production request)
18	Text possible On/Off selection of Text (toggle function).
19	Direct access to Stereo Separation. With Cursor Up/Down command the Separation can be adjusted. (no need to select the menu).

20	see TT10 In case of TT functions which give the possibility of "Direct access", the adjsutment can be done with Cursor Up/Down commands. After releasing the selected TT function by TT 00 or other TT number the adjustment value is stored automatically.
21	no function
22	no function
23	no function
24	no function
25	no function
26	Text Character Char set 06 -> West Europe (see 9.24 Test Character Set)
27	Text Character Char set 38 -> East Europe (see 9.24 Test Character Set)
28	Text Character Char set 40 -> West Europe US English (see 9.24 Test Character Set)
29	Text Character Char set 55 -> West Europe Turkish (see 9.24 Test Character Set)
30	see TT10
31	Direct access to Red Gain [TDA4780]
32	Direct access to Green Gain [TDA4780]
33	Direct access to Blue Gain [TDA4780]
34	Reserved for TDA4780 Red Level Ref.
35	Reserved for TDA4780 Green Level Ref.
36	Reserved for TDA4780 Blue Level Ref.
37	Direct access to Peak Dirve Limit [TDA4780]
38	Direct access to Gamma Level [TDA4780]
39	no function
40	see TT 10
41	TDA4780 is set to default data (almost Center positions).
42	TDA4780 is set to default data (almost Center positions).
43	TDA4780 is set to default data (almost Center positions).
44	ECO 2 is set to default data.
45	Set NVM to Protect mode (Bank 0AEH Adr. 0FFH write with 0).

46	IR CHannel Pressetting Mode The channel presseting can be done by a Special IR Transmitter Sequence: TT 46 -> -- PR Number select display appears Select Prog. No from where the channels shall be stored. --> Now TV is waiting for IR sequence. <- --> If no IR transmission starts TT 46 is released after 20 sec. <-- ! Note: when TT 46 is active, any IR transmission will be interpreted as PROG Data!
47	Adjustment of MPIP MultiPIP horizontal position.
48	Adjsutment of MPIP MultiPIP vertical position. After using TT 49 a complete new adjustment is necessary!!!
49	The EEPROM Testbyte is erased. After Power OFF -> ON the complete EEPROM data (except channel tables) are overwritten. EEPROM Protection Byte is set to 0 - protection mode.

Note :
For No. 35 / 36 / 37 / 38 special pressing (AKB, forced Color Mode, Trap) is selected.
After selecting a new Test Mode Number, the AKB is switched ON, the Trap is switched On and TDA9145 is switched to Auto Search Mode.

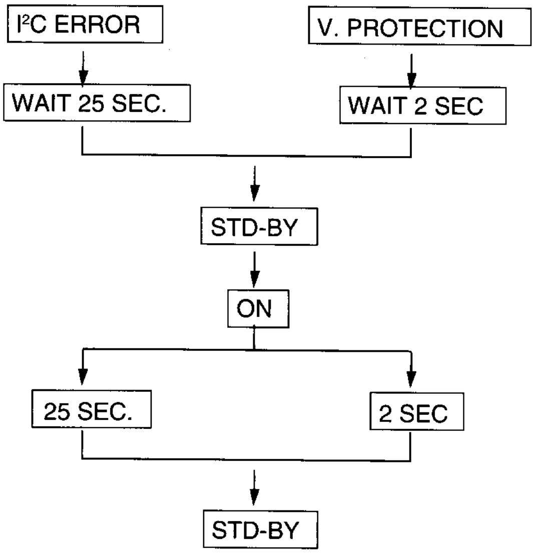
Note :
Functions TT 41 / 42 / 43 / 44 are only available when PR 99 is selected, to avoid inadvertent usage. These functions overwrite the complete data package for the selected IC in the EEPROM. After using one of these functions a complete new adjustment of the selected IC is necessary !!!!!

In Test Mode 2 the Menu display is switchable by the Speaker-Off button.

4-4. ERROR MESSAGE

Self diagnostic system operates as follows.

- When the microprocessor is unable to receive an acknowledgement back from the device, the LED starts flashing according to the table below.



In the case of more than one error in parallel, the blinking error shows max priority according to the error number (e.g. error 2 and error 5 appear together, then LED,s show error 2).

ERROR TABLE

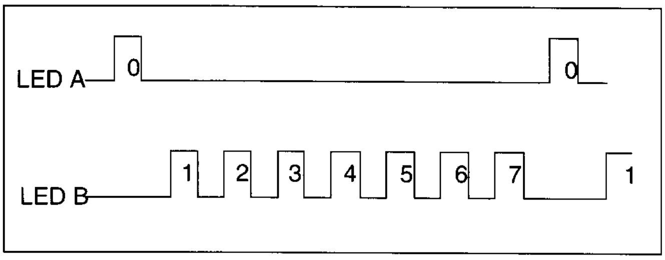
ERROR COUNT	IC TYPE	FUNCTION
1	II C BUS	SDA low
2	NVM	EEPROM
3	SDA3202	Tuner Pll
4	TDA9145	Colour decoder
5	TDA4780	RGB/Jungle
6	TDA6812	Sound processor
7	CXD2018Q	V deflection
8	CXA1855S	AV switch
11	SDA5273P	Text
13		V protection

Stand By LED blinking No 1K return

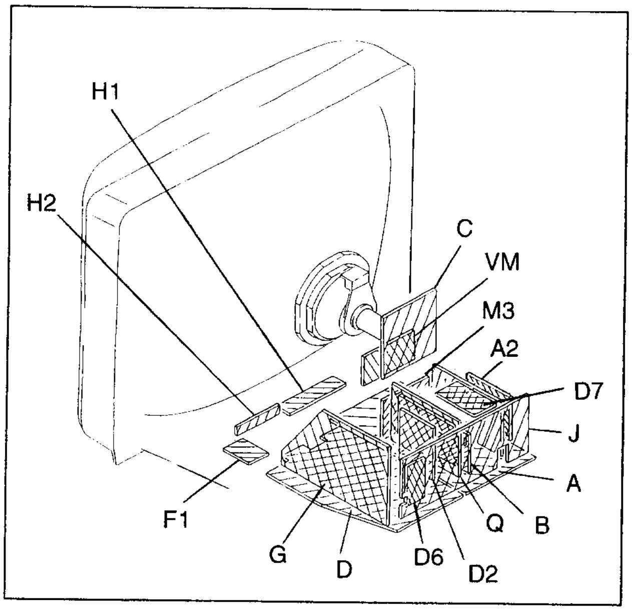
4-5. ERROR I^{2}C BUS DIAGNOSTIC SYSTEM FOR AE-2F CHASSIS.

For all IC's used in the AE -2F chassis which are necessary to obtain picture and sound there is an inbuilt I C^2 Bus diagnostic system.

In the case of no acknowledge bit, LED A and LED B start blinking as shown.



5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted.
  pF: μμF 50WV or less are not indicated except for electrolytic and tantalums.
- All electrolytics are in 50V unless otherwise specified.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm Rating electrical power 1/4W

- Chips resistors are 1/10W.
- All resistors are in ohms.
  kΩ=1000Ω, MΩ=1000KΩ
- ⊟ : nonflammable resistor.
- ⊟ : fusible resistor.
- △: internal component.
- □: panel designation, and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ⊥ : earth-ground. (cool)
- ⏚ : earth-chassis. (hot)

- All voltages are in V.
- Voltage are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 MΩ digital multimeter.
- Readings are taken with a PALcolour-bar signal input.
- Voltage variations may be noted due to normal production tolerance.
- Circled numbers are waveform references.
- ▭ : B+ line.
- ▭ : B– line.
- ▒▶ : signal path.

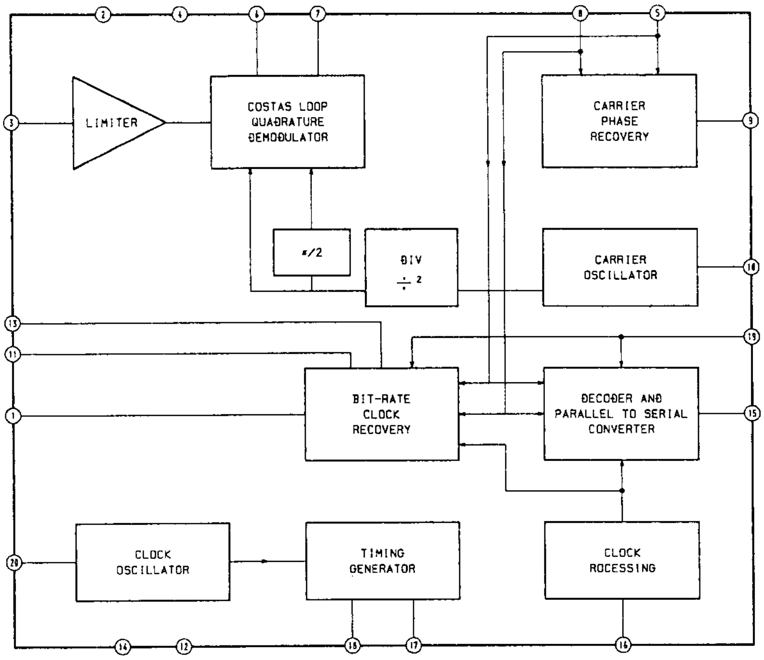
Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: ※	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

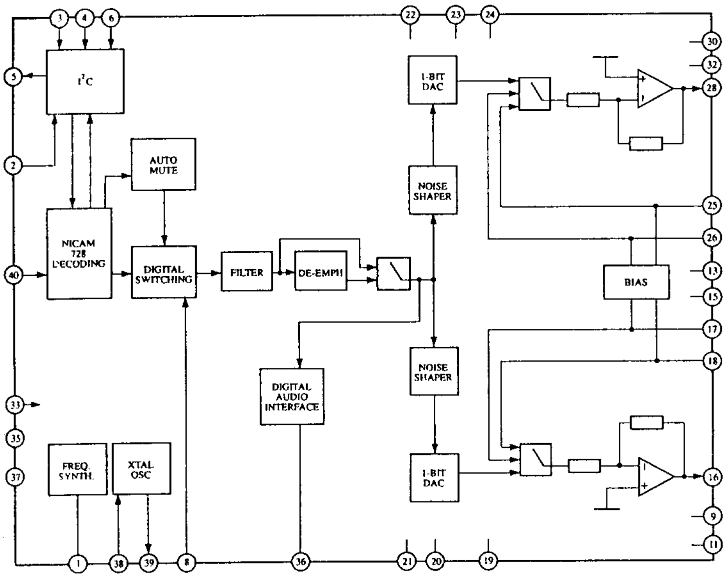
Note:
Components identified by shading and marked ⚠ are critical for safety. Replace only with the part number specified.

Note:
Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

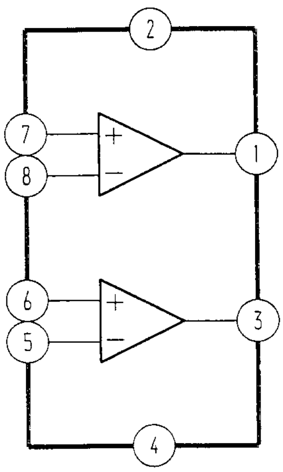
A2 BOARD IC1101 TDA8732


2
4
6
7
8
5
3
LIMITER
COSTAS LOOP QUADRATURE DEMODULATOR
CARRIER PHASE RECOVERY
9
π/2
DIV ÷ 2
CARRIER OSCILLATOR
10
13
11
19
1
BIT-RATE CLOCK RECOVERY
DECODER AND PARALLEL TO SERIAL CONVERTER
15
20
CLOCK OSCILLATOR
TIMING GENERATOR
CLOCK ROCESSING
14
12
18
17
16

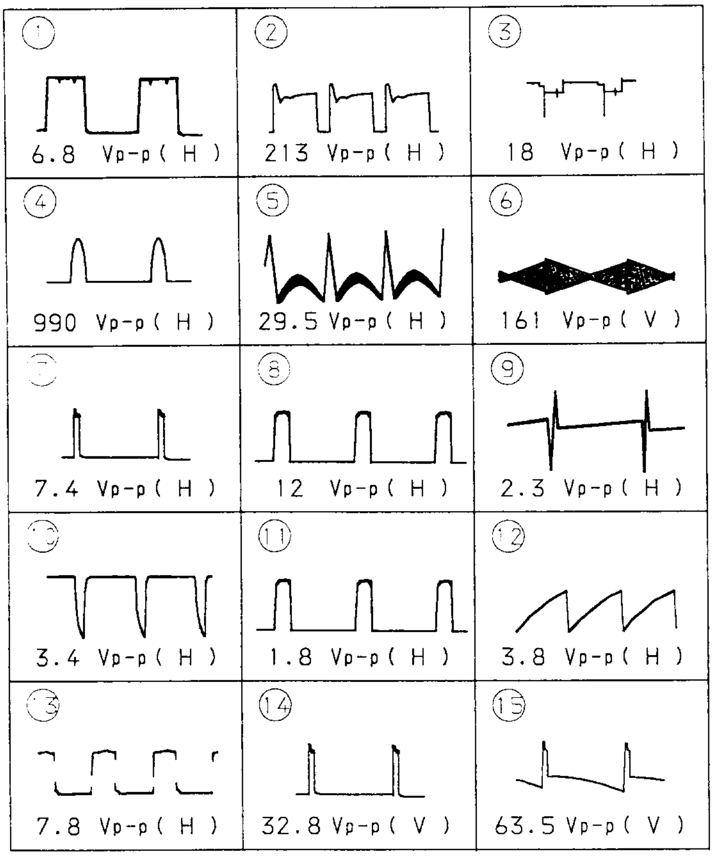
A2 BOARD IC1102 SAA7282-ZP


3
4
6
22
23
24
30
32
28
5
I²C
1-BIT DAC
2
AUTO MUTE
NOISE SHAPER
25
26
NICAM 728 DECODING
40
DIGITAL SWITCHING
FILTER
DE-EMPH
BIAS
13
15
17
18
DIGITAL AUDIO INTERFACE
NOISE SHAPER
33
35
37
FREQ. SYNTH.
XTAL OSC
1-BIT DAC
16
9
11
1
38
39
8
36
21
20
19

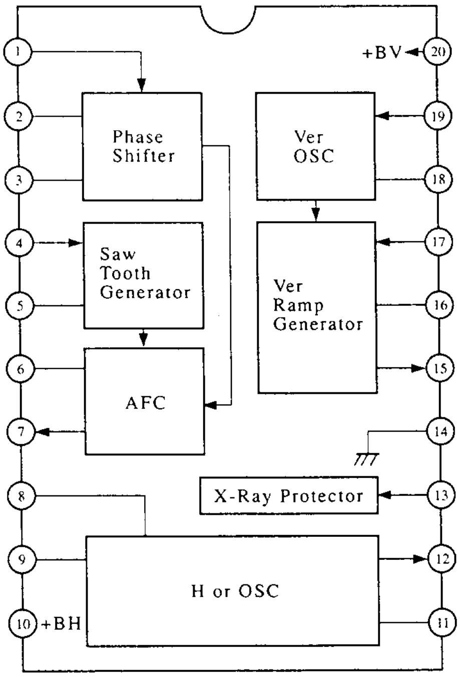
A2 BOARD IC2202 TDA2822M



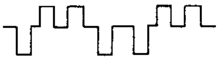
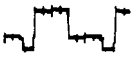
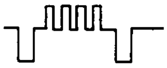
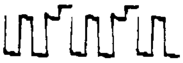
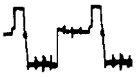
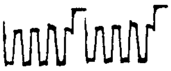
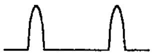
— D Board —



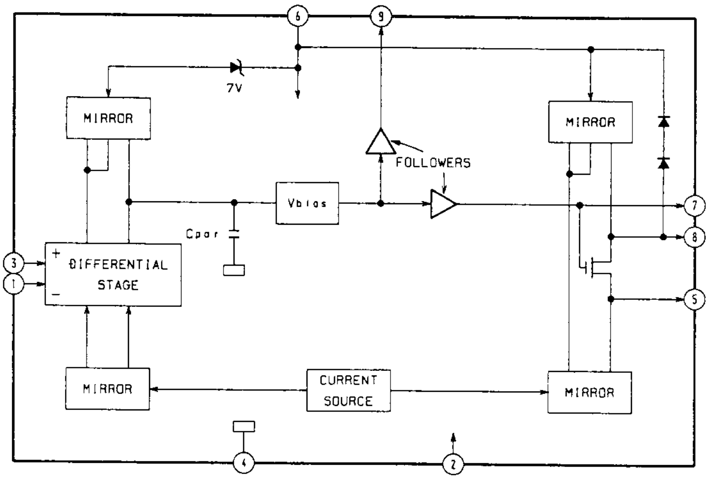
D BOARD IC2501 LA7856


1
2
3
4
5
6
7
8
9
10
+BH
11
12
13
14
15
16
17
18
19
20
+BV
Phase Shifter
Saw Tooth Generator
AFC
Ver OSC
Ver Ramp Generator
X-Ray Protector
H or OSC

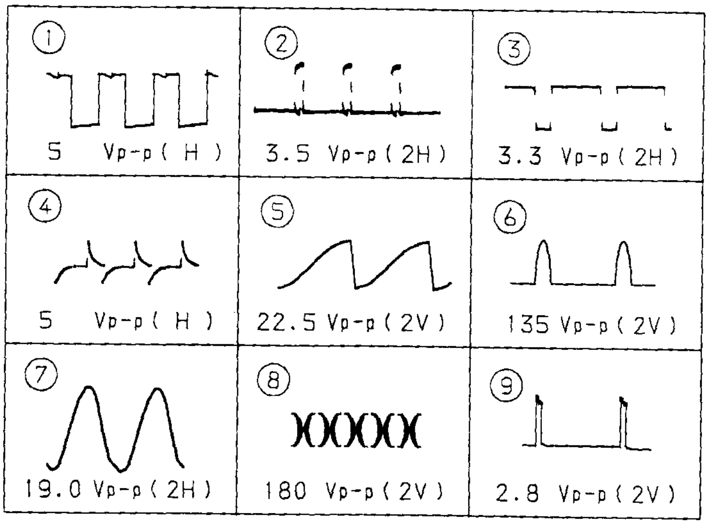
— C Board —

①  2 Vp-p (2H)	②  2 Vp-p (2H)	③  2 Vp-p (2H)
④  112 Vp-p (2H)	⑤  110 Vp-p (2H)	⑥  110 Vp-p (2H)
⑦  22.2 Vp-p (2H)		

C BOARD IC703,704,705 TDA6111Q

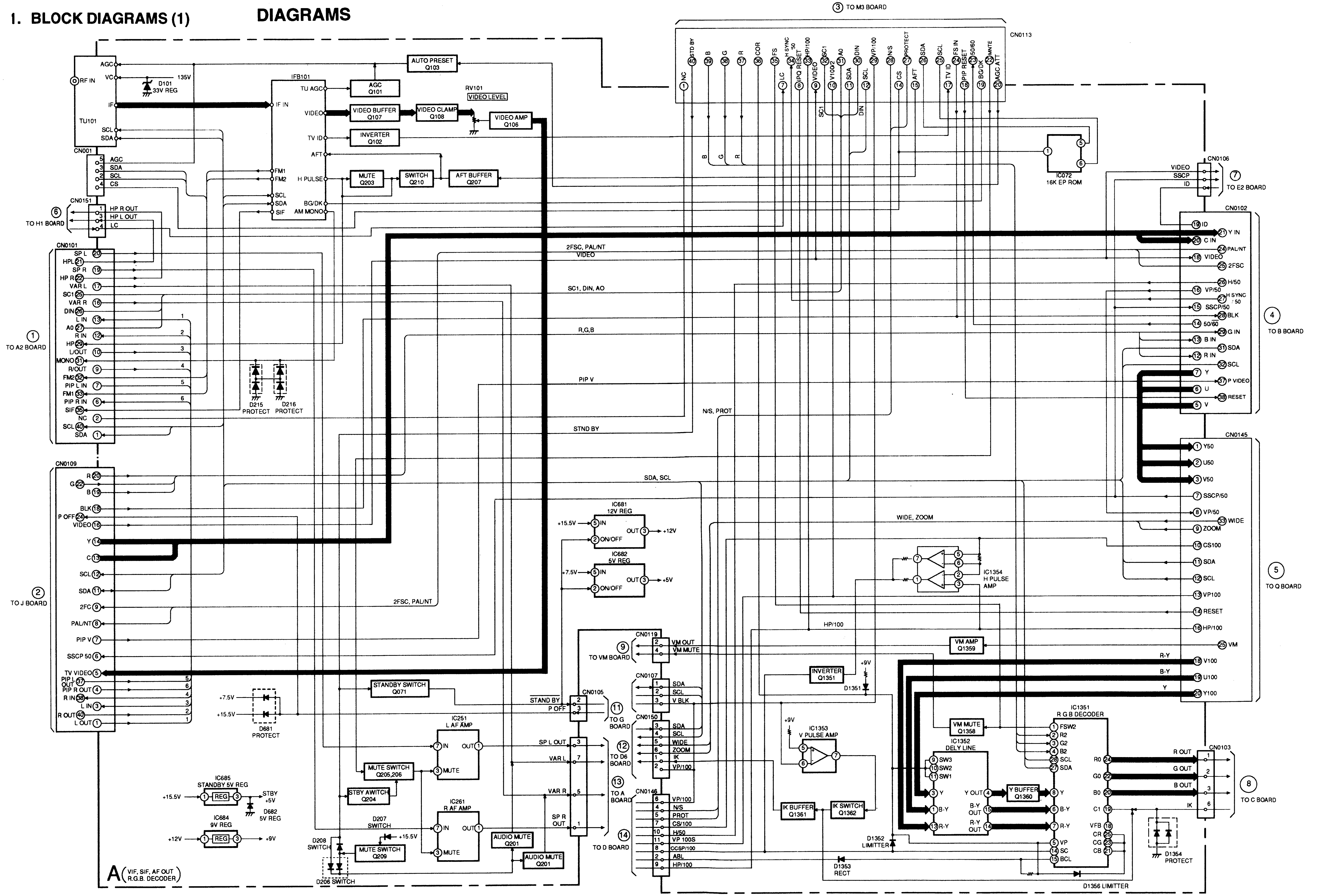

6
9
7V
MIRROR
MIRROR
FOLLOWERS
Vbias
Cpar
7
8
5
3
1
+
DIFFERENTIAL STAGE
−
MIRROR
CURRENT SOURCE
MIRROR
4
2

— D2 Board —


①
5 Vp-p (H)
②
3.5 Vp-p (2H)
③
3.3 Vp-p (2H)
④
5 Vp-p (H)
⑤
22.5 Vp-p (2V)
⑥
135 Vp-p (2V)
⑦
19.0 Vp-p (2H)
⑧
180 Vp-p (2V)
⑨
2.8 Vp-p (2V)

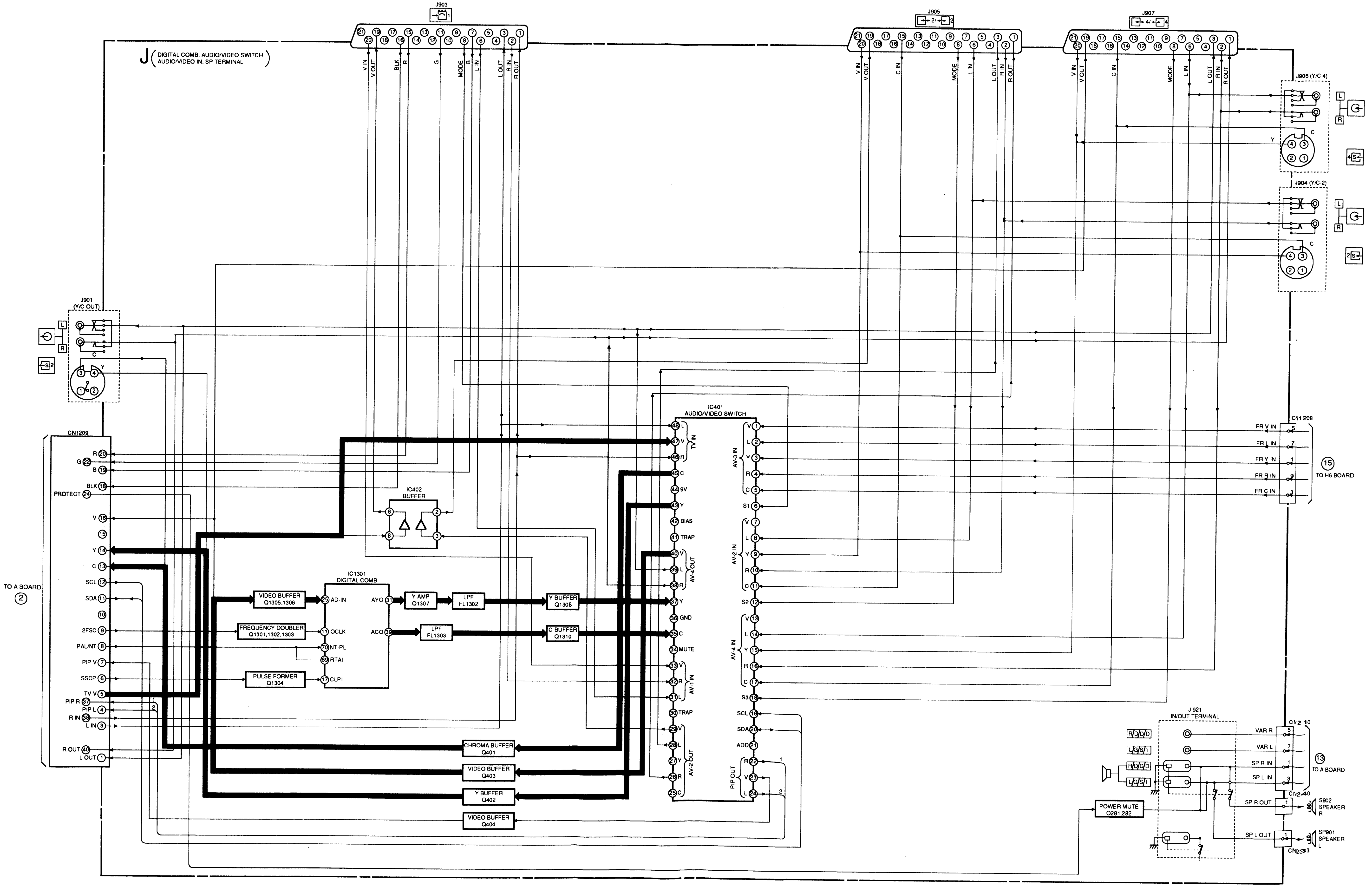
DIAGRAMS

1. BLOCK DIAGRAMS (1)

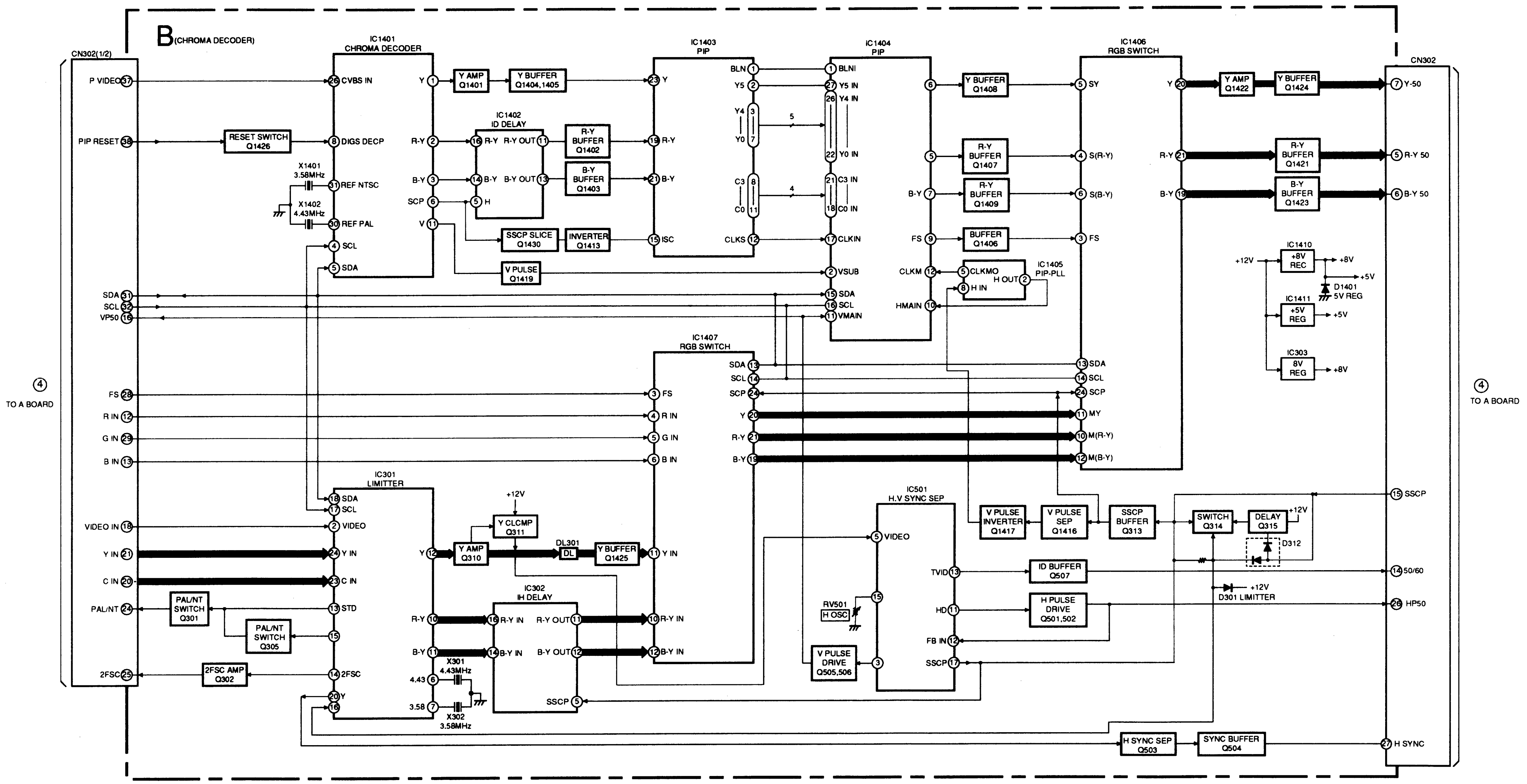


③ TO M3 BOARD
CN0113
RF IN
TU101
AGC
VC
IF
SCL
SDA
135V
D101 33V REG
CN001
AUTO PRESET Q103
IFB101
TU AGC
VIDEO
TV ID
AFT
H PULSE
BG/DK
AM MONO
IF IN
FM1
FM2
SIF
AGC Q101
VIDEO BUFFER Q107
VIDEO CLAMP Q108
RV101 VIDEO LEVEL
VIDEO AMP Q106
INVERTER Q102
MUTE Q203
SWITCH Q210
AFT BUFFER Q207
CN0151
HP R OUT
HP L OUT
LC
⑥ TO H1 BOARD
CN0101
① TO A2 BOARD
SP L
HPL
SP R
HP R
VAR L
SC1
VAR R
DIN
L IN
A0
R IN
HP
L/OUT
MONO
R/OUT
FM2
PIP L IN
FM1
PIP R IN
SIF
NC
SCL
SDA
D215 PROTECT
D216 PROTECT
CN0109
② TO J BOARD
R
G
B
BLK
P OFF
VIDEO
Y
C
SCL
SDA
2FC
PAL/NT
PIP V
SSCP 50
TV VIDEO
PIP L OUT
PIP R OUT
R IN
L IN
R OUT
L OUT
2FSC, PAL/NT
SC1, DIN, AO
R,G,B
PIP V
STND BY
N/S, PROT
SDA, SCL
WIDE, ZOOM
HP/100
IC681 12V REG
IC682 5V REG
+15.5V
+7.5V
IN
ON/OFF
OUT
+12V
+5V
D681 PROTECT
STANDBY SWITCH Q071
IC251 L AF AMP
IC261 R AF AMP
MUTE SWITCH Q205,206
STBY AWITCH Q204
D207 SWITCH
MUTE SWITCH Q209
AUDIO MUTE Q201
D208 SWITCH
D206 SWITCH
IC685 STANDBY 5V REG
STBY +5V
D682 5V REG
IC684 9V REG
+9V
REG
A (VIF, SIF, AF OUT R.G.B. DECODER)
CN0119
VM OUT
VM MUTE
⑨ TO VM BOARD
CN0107
V BLK
CN0150
WIDE
ZOOM
IK
VP/100
CN0105
STAND BY
P OFF
⑪ TO G BOARD
⑫ TO D6 BOARD
⑬ TO A BOARD
⑭ TO D BOARD
SP L OUT
VAR L
VAR R
SP R OUT
CN0146
N/S
PROT
CS/100
H/50
VP 100S
CCSP/100
ABL
HP/100
IC072 16K EP ROM
CN0106
VIDEO
SSCP
ID
⑦ TO E2 BOARD
CN0102
④ TO B BOARD
Y IN
C IN
PAL/NT
2FSC
H/50
VP/50
H SYNC /50
SSCP/50
BLK
50/60
G IN
B IN
R IN
SCL
P VIDEO
RESET
U
V
CN0145
⑤ TO Q BOARD
Y50
U50
V50
WIDE
ZOOM
CS100
VP100
VM
V100
U100
Y100
R-Y
B-Y
IC1354 H PULSE AMP
VM AMP Q1359
INVERTER Q1351
D1351
IC1353 V PULSE AMP
VM MUTE Q1358
IC1352 DELY LINE
SW3
SW2
SW1
Y OUT
B-Y OUT
R-Y OUT
Y BUFFER Q1360
IC1351 R G B DECODER
FSW2
R2
G2
B2
VP
SC
BCL
R0
G0
B0
C1
VFB
CR
CG
CB
IK BUFFER Q1361
IK SWITCH Q1362
D1352 LIMITTER
D1353 RECT
D1356 LIMITTER
D1354 PROTECT
CN0103
R OUT
G OUT
B OUT
⑧ TO C BOARD
NC
STD BY
COR
FS
LC
H SYNC /50
IPQ RESET
HP/100
V100/2
SCL
VP/100
N/S
CS
PROTECT
FS IN
TV ID
PIP RESET
50/60
BG/DK
MNTE
AGC ATT

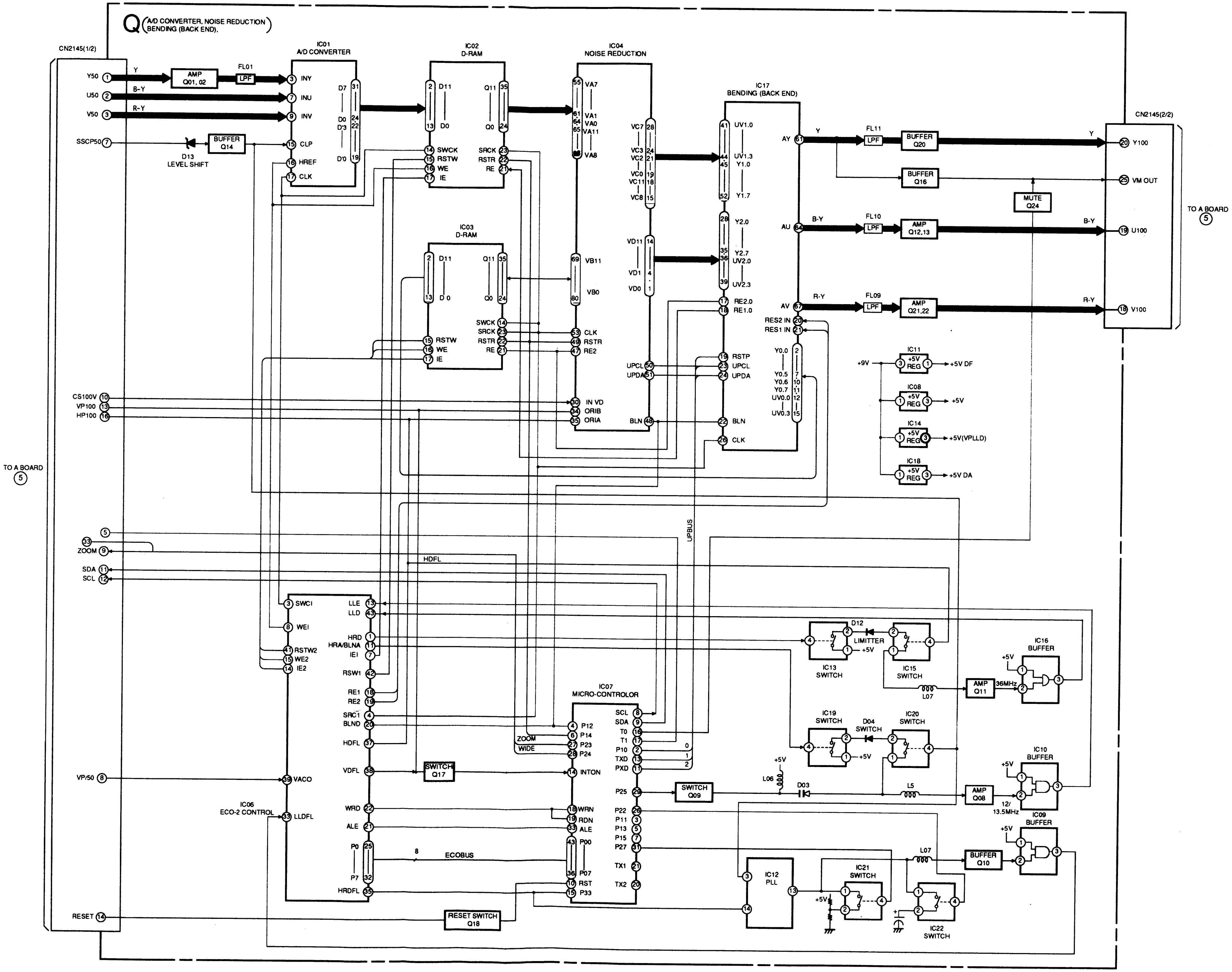
BLOCK DIAGRAMS (2)


J (DIGITAL COMB, AUDIO/VIDEO SWITCH AUDIO/VIDEO IN, SP TERMINAL)
J903
J905
J907
J906 (Y/C 4)
J904 (Y/C 2)
J901 (Y/C OUT)
V IN
V OUT
BLK
R
G
MODE
B
L IN
L OUT
R IN
R OUT
C IN
CN1209
R 20
G 22
B 19
BLK 18
PROTECT 24
V 16
15
Y 14
C 13
SCL 12
SDA 11
10
2FSC 9
PAL/NT 8
PIP V 7
SSCP 6
TV V 5
PIP R 37
PIP L 4
R IN 38
L IN 3
R OUT 40
L OUT 1
TO A BOARD
②
IC402
BUFFER
IC1301
DIGITAL COMB
VIDEO BUFFER
Q1305,1306
FREQUENCY DOUBLER
Q1301,1302,1303
PULSE FORMER
Q1304
25 AD-IN
11 OCLK
70 NT-PL
69 RTAI
17 CLPI
AYO 31
ACO 39
Y AMP
Q1307
LPF
FL1302
LPF
FL1303
Y BUFFER
Q1308
C BUFFER
Q1310
CHROMA BUFFER
Q401
VIDEO BUFFER
Q403
Y BUFFER
Q402
VIDEO BUFFER
Q404
IC401
AUDIO/VIDEO SWITCH
48 L
47 V
46 R
TV IN
45 C
44 9V
43 Y
42 BIAS
41 TRAP
40 V
39 L
38 R
AV-4 OUT
37 Y
36 GND
35 C
34 MUTE
33 V
32 R
31 L
AV-1 IN
30 TRAP
29 V
28 L
27 Y
26 R
25 C
AV-2 OUT
V 1
L 2
Y 3
R 4
C 5
AV-3 IN
S1 6
V 7
L 8
Y 9
R 10
C 11
AV-2 IN
S2 12
V 13
L 14
Y 15
R 16
C 17
AV-4 IN
S3 18
SCL 19
SDA 20
ADD 21
R 22
V 23
L 24
PIP OUT
CN1208
FR V IN
FR L IN
FR Y IN
FR R IN
FR C IN
⑮
TO H6 BOARD
J 921
IN/OUT TERMINAL
R/D/D/D
L/G/S/1
VAR R
VAR L
SP R IN
SP L IN
SP R OUT
SP L OUT
CN2 10
CN240
CN233
⑬
TO A BOARD
POWER MUTE
Q281,282
S902
SPEAKER
R
SP901
SPEAKER
L

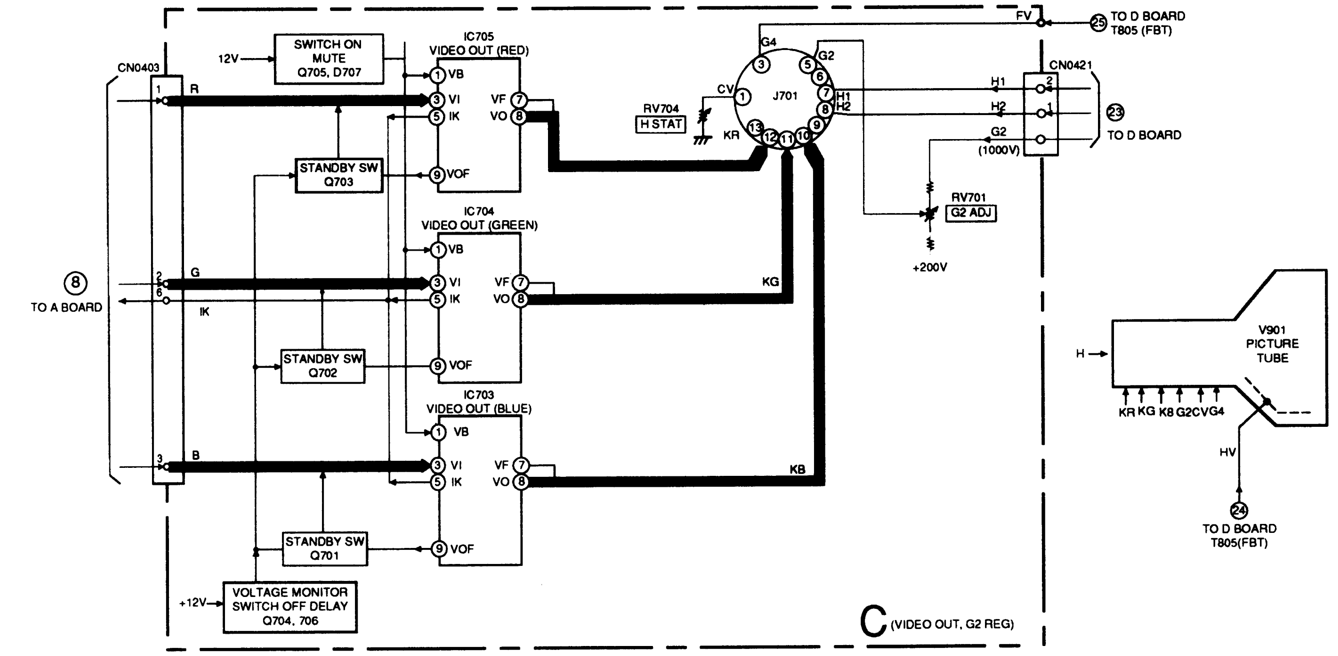
BLOCK DIAGRAMS (3)


B (CHROMA DECODER)
CN302(1/2)
P VIDEO 37
PIP RESET 38
SDA 31
SCL 32
VP50 16
FS 28
R IN 12
G IN 29
B IN 13
VIDEO IN 18
Y IN 21
C IN 20
PAL/NT 24
2FSC 25
④
TO A BOARD
RESET SWITCH Q1426
X1401 3.58MHz
X1402 4.43MHz
IC1401 CHROMA DECODER
26 CVBS IN
8 DIGS DECP
31 REF NTSC
30 REF PAL
4 SCL
5 SDA
Y 1
R-Y 2
B-Y 3
SCP 6
V 11
Y AMP Q1401
Y BUFFER Q1404,1405
IC1402 ID DELAY
16 R-Y
14 B-Y
5 H
R-Y OUT 11
B-Y OUT 13
R-Y BUFFER Q1402
B-Y BUFFER Q1403
SSCP SLICE Q1430
INVERTER Q1413
V PULSE Q1419
IC1403 PIP
23 Y
19 R-Y
21 B-Y
15 ISC
BLN 1
Y5 2
Y4 3
Y0 7
C3 8
C0 11
CLKS 12
5
4
IC1404 PIP
1 BLNI
27 Y5 IN
26 Y4 IN
22 Y0 IN
21 C3 IN
18 C0 IN
17 CLKIN
2 VSUB
15 SDA
16 SCL
11 VMAIN
6
5
B-Y 7
FS 9
CLKM 12
HMAIN 10
IC1405 PIP-PLL
5 CLKMO
8 H IN
H OUT 2
Y BUFFER Q1408
R-Y BUFFER Q1407
R-Y BUFFER Q1409
BUFFER Q1406
IC1406 RGB SWITCH
5 SY
4 S(R-Y)
6 S(B-Y)
3 FS
13 SDA
14 SCL
24 SCP
11 MY
10 M(R-Y)
12 M(B-Y)
Y 20
R-Y 21
B-Y 19
Y AMP Q1422
Y BUFFER Q1424
R-Y BUFFER Q1421
B-Y BUFFER Q1423
IC1410 +8V REC
+12V
+8V
+5V
D1401 5V REG
IC1411 +5V REG
+5V
IC303 8V REG
+8V
CN302
7 Y-50
5 R-Y 50
6 B-Y 50
15 SSCP
14 50/60
26 HP50
27 H SYNC
④
TO A BOARD
IC1407 RGB SWITCH
3 FS
4 R IN
5 G IN
6 B IN
11 Y IN
10 R-Y IN
12 B-Y IN
SDA 13
SCL 14
SCP 24
Y 20
R-Y 21
B-Y 19
IC301 LIMITTER
18 SDA
17 SCL
2 VIDEO
24 Y IN
23 C IN
13 STD
15
14 2FSC
20 Y
16
Y 12
R-Y 10
B-Y 11
4.43 6
3.58 7
X301 4.43MHz
X302 3.58MHz
PAL/NT SWITCH Q301
PAL/NT SWITCH Q305
2FSC AMP Q302
+12V
Y CLCMP Q311
Y AMP Q310
DL301
DL
Y BUFFER Q1425
IC302 IH DELAY
16 R-Y IN
14 B-Y IN
R-Y OUT 11
B-Y OUT 12
SSCP 5
IC501 H.V SYNC SEP
5 VIDEO
15
3
TVID 13
HD 11
FB IN 12
SSCP 17
RV501
H OSC
V PULSE DRIVE Q505,506
V PULSE INVERTER Q1417
V PULSE SEP Q1416
SSCP BUFFER Q313
SWITCH Q314
DELAY Q315
+12V
D312
ID BUFFER Q507
H PULSE DRIVE Q501,502
+12V
D301 LIMITTER
H SYNC SEP Q503
SYNC BUFFER Q504

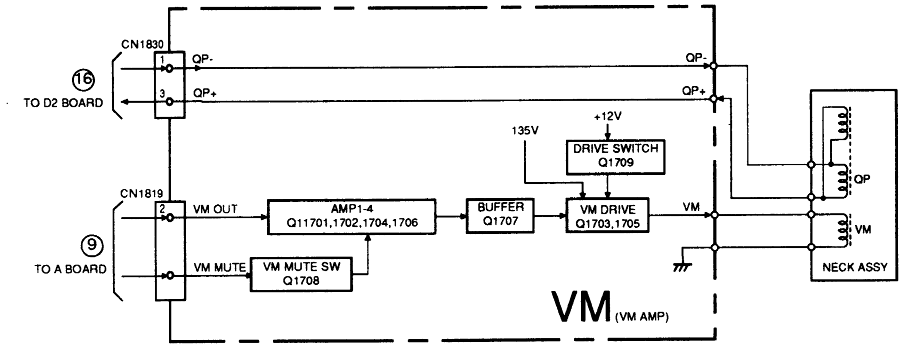
BLOCK DIAGRAMS (4)


Q (A/D CONVERTER, NOISE REDUCTION BENDING (BACK END).
CN2145(1/2)
Y50
U50
V50
SSCP50
CS100V
VP100
HP100
ZOOM
SDA
SCL
VP/50
RESET
TO A BOARD ⑤
Y
B-Y
R-Y
AMP Q01, 02
FL01 LPF
BUFFER Q14
D13 LEVEL SHIFT
IC01 A/D CONVERTER
INY
INU
INV
CLP
HREF
CLK
D7
D0
D'3
D'0
IC02 D-RAM
D11
D0
Q11
Q0
SWCK
RSTW
WE
IE
SRCK
RSTR
RE
IC03 D-RAM
IC04 NOISE REDUCTION
VA7
VA1
VA0
VA11
VA8
VB11
VB0
CLK
RSTR
RE2
IN VD
ORIB
ORIA
VC7
VC3
VC2
VC0
VC11
VC8
VD11
VD1
VD0
UPCL
UPDA
BLN
IC17 BENDING (BACK END)
UV1.0
UV1.3
Y1.0
Y1.7
Y2.0
Y2.7
UV2.0
UV2.3
RE2.0
RE1.0
RSTP
UPCL
UPDA
BLN
CLK
AY
AU
AV
RES2 IN
RES1 IN
Y0.0
Y0.5
Y0.6
Y0.7
UV0.0
UV0.3
UPBUS
FL11 LPF
BUFFER Q20
BUFFER Q16
MUTE Q24
FL10 LPF
AMP Q12,13
FL09 LPF
AMP Q21,22
CN2145(2/2)
Y100
VM OUT
U100
V100
TO A BOARD ⑤
+9V
IC11 +5V REG
+5V DF
IC08 +5V REG
+5V
IC14 +5V REG
+5V(VPLLD)
IC18 +5V REG
+5V DA
HDFL
IC06 ECO-2 CONTROL
SWCI
WEI
RSTW2
WE2
IE2
VACO
LLDFL
LLE
LLD
HRD
HRA/BLNA
IEI
RSW1
RE1
RE2
SRC1
BLND
HDFL
VDFL
WRD
ALE
P0
P7
HRDFL
SWITCH Q17
ECOBUS
8
RESET SWITCH Q18
IC07 MICRO-CONTROLOR
P12
P14
P23
P24
ZOOM
WIDE
INTON
WRN
RDN
ALE
P00
P07
RST
P33
SCL
SDA
T0
T1
P10
TXD
PXD
0
1
2
P25
P22
P11
P13
P15
P27
TX1
TX2
SWITCH Q09
L06
+5V
D03
L5
AMP Q08
12/ 13.5MHz
IC13 SWITCH
D12 LIMITTER
IC15 SWITCH
L07
AMP Q11
36MHz
IC16 BUFFER
IC19 SWITCH
D04 SWITCH
IC20 SWITCH
IC10 BUFFER
IC09 BUFFER
IC12 PLL
IC21 SWITCH
IC22 SWITCH
L07
BUFFER Q10

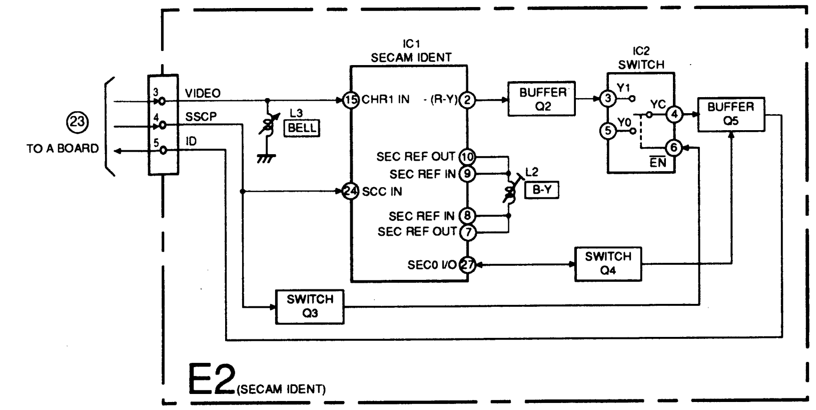
BLOCK DIAGRAMS (5)



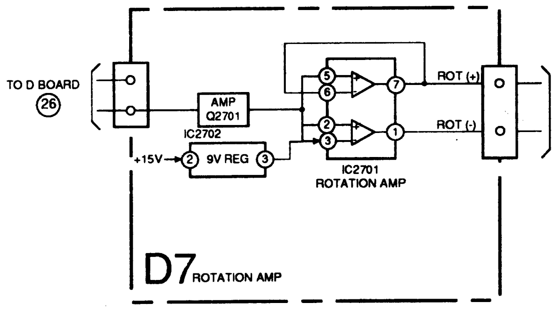
C (VIDEO OUT, G2 REG)
CN0403
⑧ TO A BOARD
R
G
IK
B
12V
SWITCH ON MUTE Q705, D707
IC705 VIDEO OUT (RED)
IC704 VIDEO OUT (GREEN)
IC703 VIDEO OUT (BLUE)
VB
VI
IK
VF
VO
VOF
STANDBY SW Q703
STANDBY SW Q702
STANDBY SW Q701
VOLTAGE MONITOR SWITCH OFF DELAY Q704, 706
+12V
J701
G4
G2
CV
KR
KG
KB
H1
H2
RV704 H STAT
RV701 G2 ADJ
+200V
FV
G2 (1000V)
㉕ TO D BOARD T805 (FBT)
CN0421
㉓ TO D BOARD
V901 PICTURE TUBE
H
KR KG KB G2 CV G4
HV
㉔ TO D BOARD T805(FBT)



VM (VM AMP)
CN1830
⑯ TO D2 BOARD
QP-
QP+
CN1819
⑨ TO A BOARD
VM OUT
VM MUTE
AMP1-4 Q11701,1702,1704,1706
VM MUTE SW Q1708
BUFFER Q1707
135V
+12V
DRIVE SWITCH Q1709
VM DRIVE Q1703,1705
VM
QP
NECK ASSY

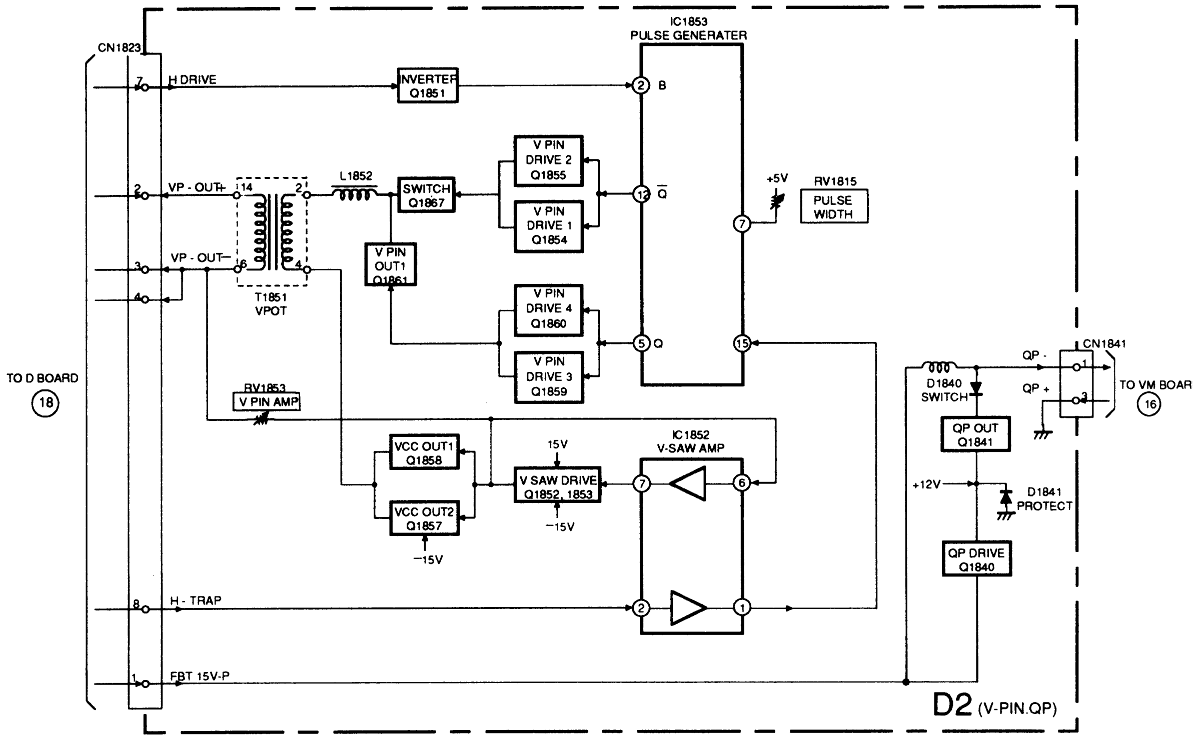


E2 (SECAM IDENT)
㉓ TO A BOARD
VIDEO
SSCP
ID
L3 BELL
IC1 SECAM IDENT
CHR1 IN
(R-Y)
SEC REF OUT
SEC REF IN
SCC IN
SEC REF IN
SEC REF OUT
SEC0 I/O
L2 B-Y
BUFFER Q2
IC2 SWITCH
Y1
Y0
YC
EN
BUFFER Q5
SWITCH Q4
SWITCH Q3

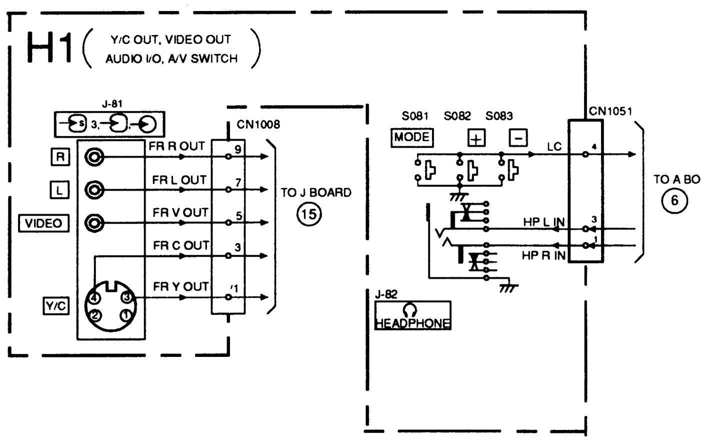


D7 ROTATION AMP
㉖ TO D BOARD
AMP Q2701
IC2702
+15V
9V REG
IC2701 ROTATION AMP
ROT (+)
ROT (-)

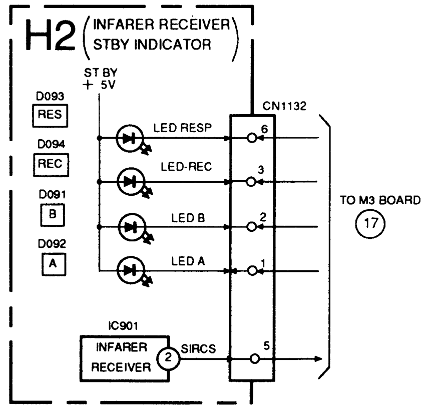
BLOCK DIAGRAMS (6)



D2 (V-PIN.QP)
CN1823
⑱ TO D BOARD
H DRIVE
VP - OUT+
VP - OUT-
H - TRAP
FBT 15V-P
INVERTER Q1851
IC1853 PULSE GENERATER
T1851 VPOT
L1852
SWITCH Q1867
V PIN OUT1 Q1861
V PIN DRIVE 2 Q1855
V PIN DRIVE 1 Q1854
V PIN DRIVE 4 Q1860
V PIN DRIVE 3 Q1859
+5V
RV1815 PULSE WIDTH
RV1853 V PIN AMP
VCC OUT1 Q1858
VCC OUT2 Q1857
-15V
15V
V SAW DRIVE Q1852, 1853
IC1852 V-SAW AMP
D1840 SWITCH
QP OUT Q1841
+12V
D1841 PROTECT
QP DRIVE Q1840
CN1841
QP -
QP +
⑯ TO VM BOARD

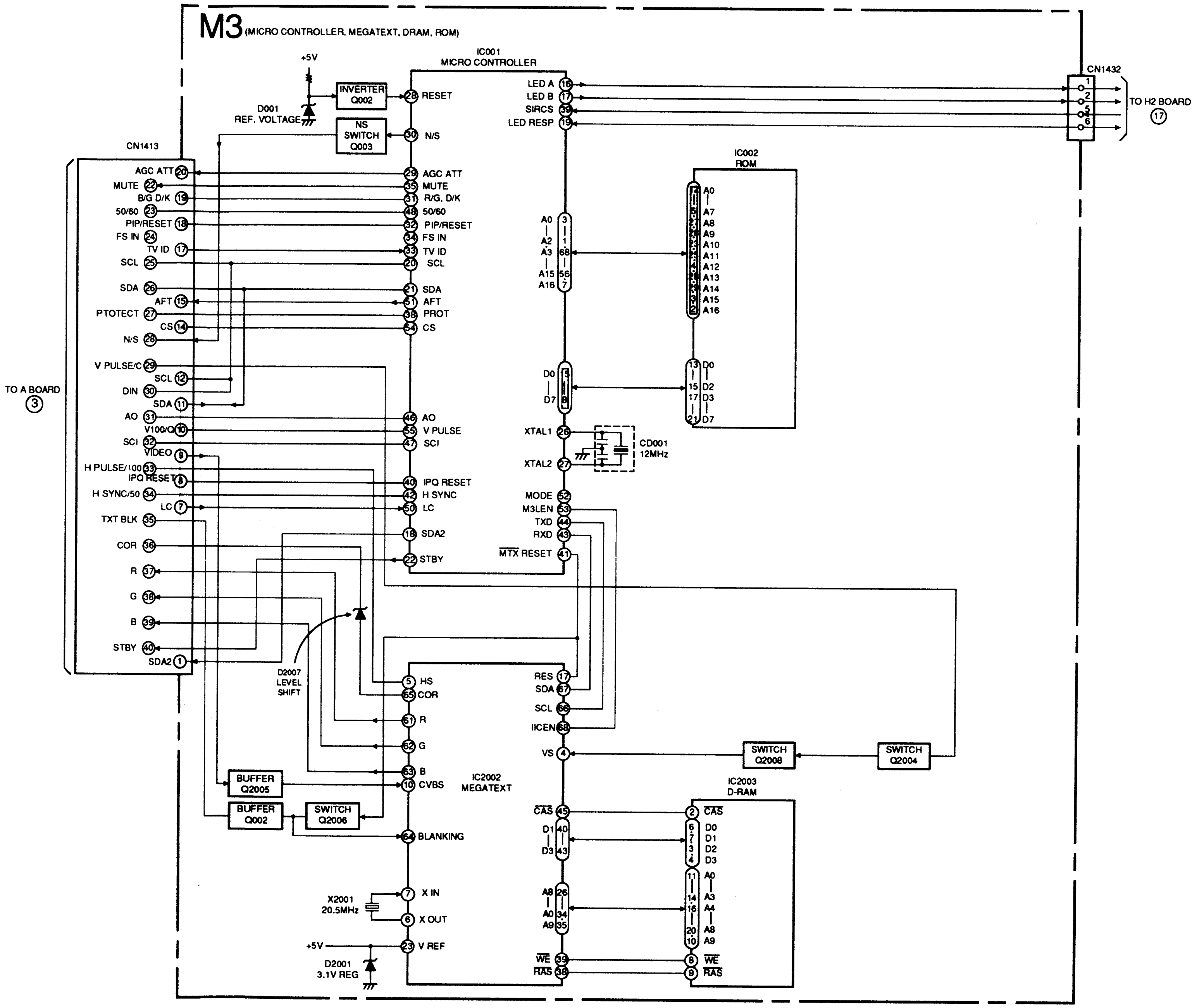


H1 (Y/C OUT, VIDEO OUT AUDIO I/O, A/V SWITCH)
J-81
R
L
VIDEO
Y/C
FR R OUT
FR L OUT
FR V OUT
FR C OUT
FR Y OUT
CN1008
⑮ TO J BOARD
S081 S082 S083
MODE
LC
HP L IN
HP R IN
J-82 HEADPHONE
CN1051
⑥ TO A BOARD

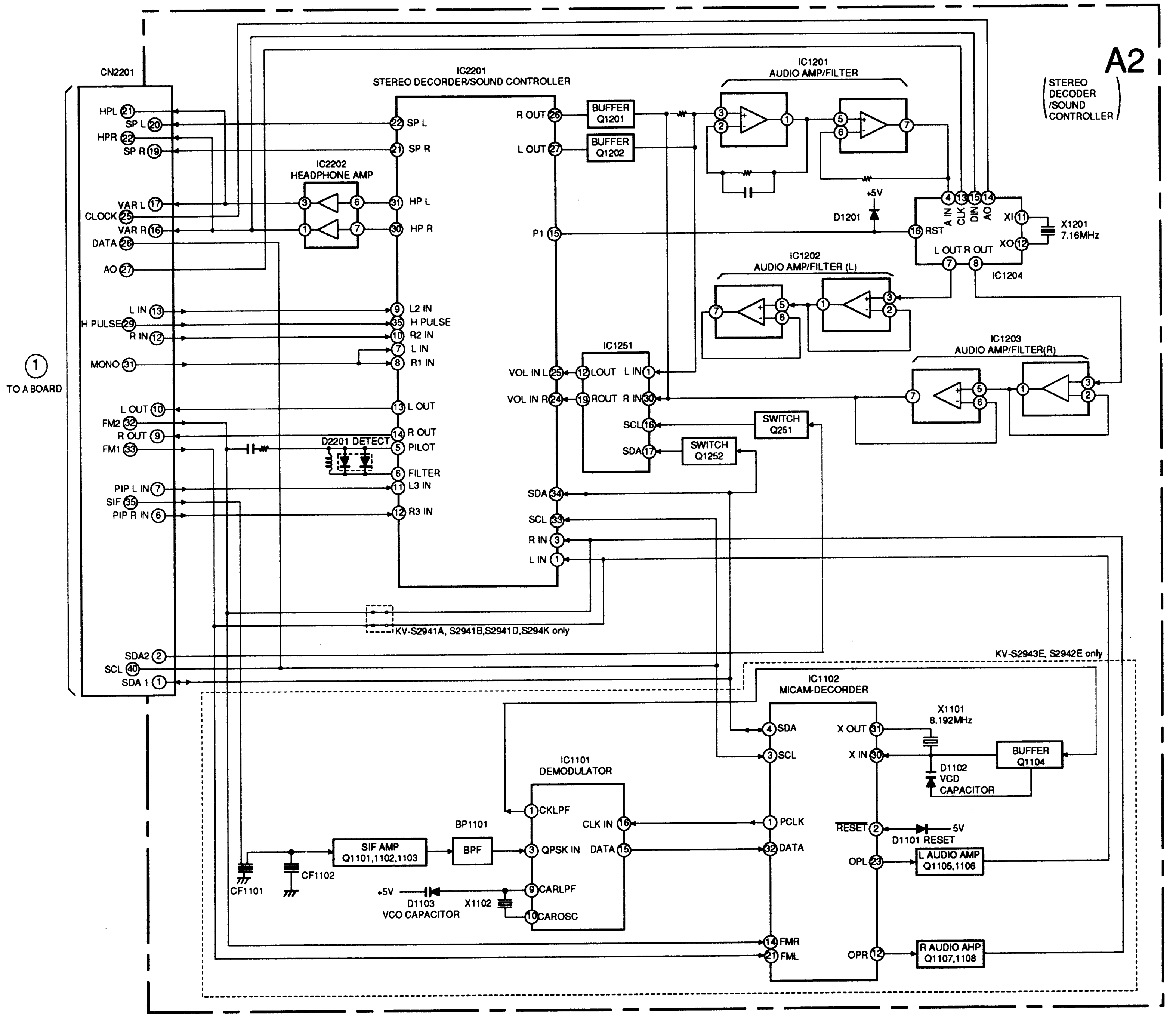


H2 (INFARER RECEIVER STBY INDICATOR)
ST BY + 5V
D093 RES
D094 REC
D091 B
D092 A
LED RESP
LED-REC
LED B
LED A
IC901 INFARER RECEIVER
SIRCS
CN1132
⑰ TO M3 BOARD

BLOCK DIAGRAMS (7)

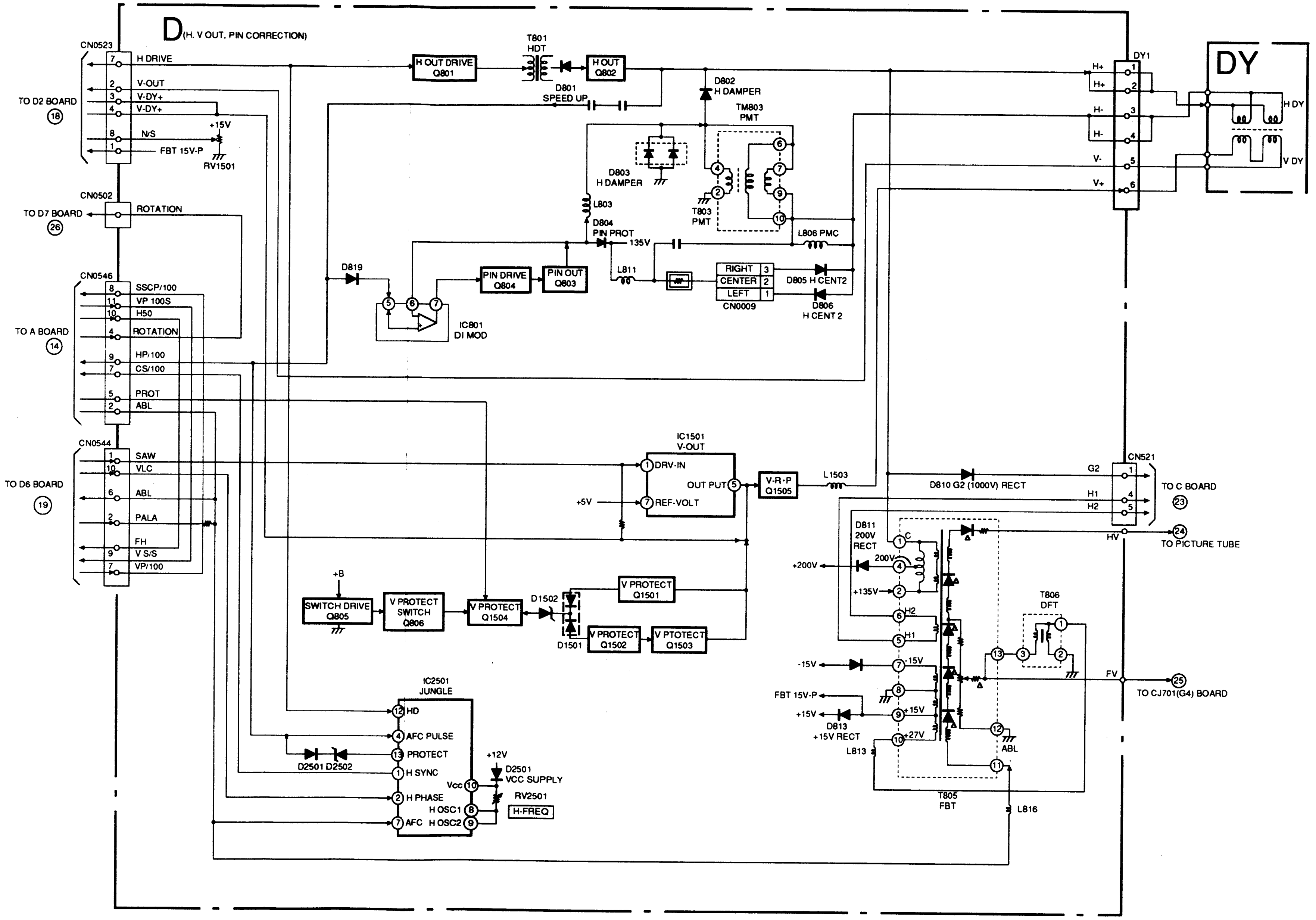

M3 (MICRO CONTROLLER, MEGATEXT, DRAM, ROM)
+5V
D001
REF. VOLTAGE
INVERTER
Q002
NS
SWITCH
Q003
IC001
MICRO CONTROLLER
28 RESET
30 N/S
29 AGC ATT
35 MUTE
31 R/G, D/K
48 50/60
32 PIP/RESET
34 FS IN
33 TV ID
20 SCL
21 SDA
51 AFT
38 PROT
54 CS
46 AO
55 V PULSE
47 SCI
40 IPQ RESET
42 H SYNC
50 LC
18 SDA2
22 STBY
LED A 16
LED B 17
SIRCS 39
LED RESP 19
A0 3
A2 1
A3 68
A15 56
A16 7
D0 5
D7 8
XTAL1 26
XTAL2 27
CD001
12MHz
MODE 52
M3LEN 53
TXD 44
RXD 43
MTX RESET 41
CN1432
1
2
5
6
TO H2 BOARD
⑰
IC002
ROM
A0
A7
A8
A9
A10
A11
A12
A13
A14
A15
A16
13 D0
15 D2
17 D3
21 D7
CN1413
AGC ATT ⑳
MUTE ㉒
B/G D/K ⑲
50/60 ㉓
PIP/RESET ⑱
FS IN ㉔
TV ID ⑰
SCL ㉕
SDA ㉖
AFT ⑮
PTOTECT ㉗
CS ⑭
N/S ㉘
V PULSE/C ㉙
SCL ⑫
DIN ㉚
SDA ⑪
AO ㉛
V100/Q ⑩
SCI ㉜
VIDEO ⑨
H PULSE/100 ㉝
IPQ RESET ⑧
H SYNC/50 ㉞
LC ⑦
TXT BLK ㉟
COR (36)
R (37)
G (38)
B (39)
STBY (40)
SDA2 ①
TO A BOARD
③
D2007
LEVEL
SHIFT
BUFFER
Q2005
BUFFER
Q002
SWITCH
Q2006
IC2002
MEGATEXT
5 HS
65 COR
61 R
62 G
63 B
10 CVBS
64 BLANKING
7 X IN
6 X OUT
23 V REF
X2001
20.5MHz
+5V
D2001
3.1V REG
RES 17
SDA 67
SCL 66
IICEN 68
VS 4
CAS 45
D1 40
D3 43
A8 26
A0 34
A9 35
WE 39
RAS 38
SWITCH
Q2008
SWITCH
Q2004
IC2003
D-RAM
2 CAS
6 D0
7 D1
3 D2
4 D3
11 A0
14 A3
16 A4
20 A8
10 A9
8 WE
9 RAS

BLOCK DIAGRAMS (8)

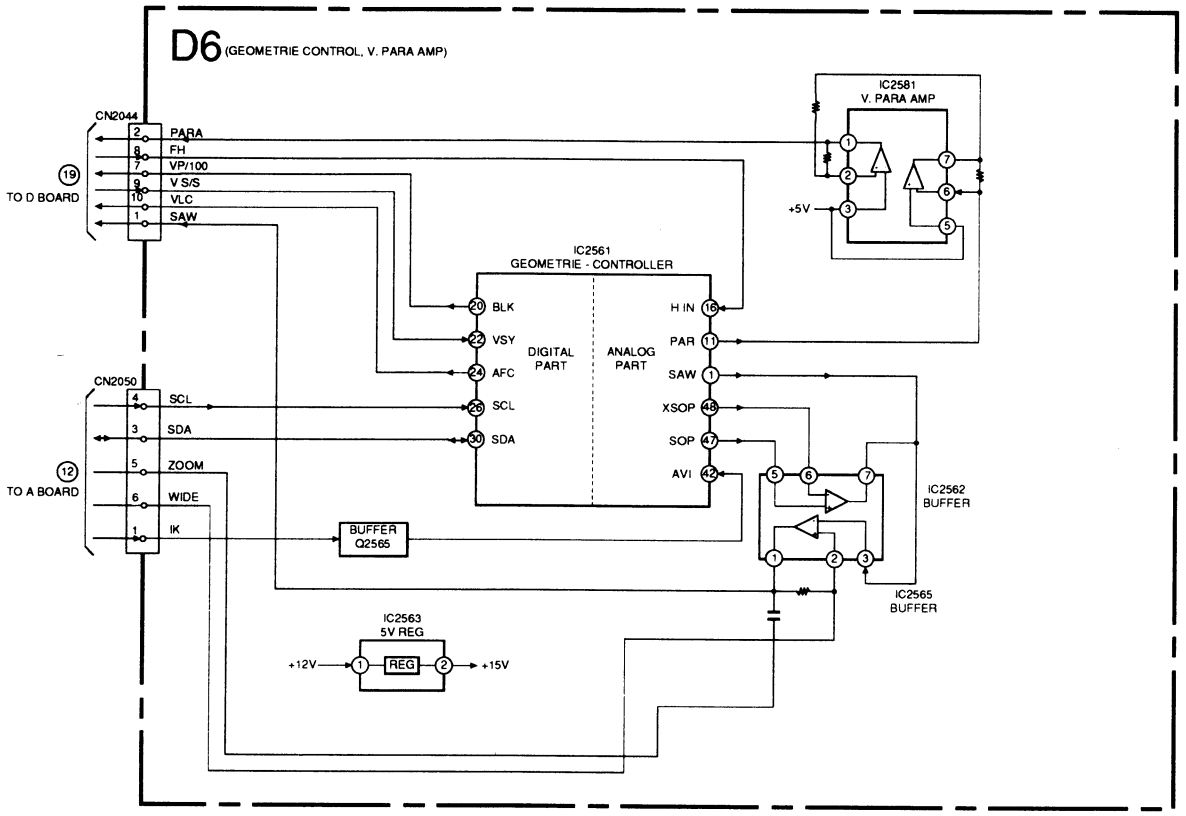


A2
STEREO DECODER /SOUND CONTROLLER
CN2201
① TO A BOARD
HPL 21
SP L 20
HPR 22
SP R 19
VAR L 17
CLOCK 25
VAR R 16
DATA 26
AO 27
L IN 13
H PULSE 29
R IN 12
MONO 31
L OUT 10
FM2 32
R OUT 9
FM1 33
PIP L IN 7
SIF 35
PIP R IN 6
SDA2 2
SCL 40
SDA 1 1
IC2201
STEREO DECORDER/SOUND CONTROLLER
22 SP L
21 SP R
31 HP L
30 HP R
9 L2 IN
35 H PULSE
10 R2 IN
7 L IN
8 R1 IN
13 L OUT
14 R OUT
5 PILOT
6 FILTER
11 L3 IN
12 R3 IN
R OUT 26
L OUT 27
P1 15
VOL IN L 25
VOL IN R 24
SDA 34
SCL 33
R IN 3
L IN 1
IC2202
HEADPHONE AMP
D2201 DETECT
BUFFER Q1201
BUFFER Q1202
IC1201
AUDIO AMP/FILTER
+5V
D1201
IC1204
A IN
CLK
DIN
AO
XI
XO
RST
L OUT R OUT
X1201
7.16MHz
IC1202
AUDIO AMP/FILTER (L)
IC1203
AUDIO AMP/FILTER(R)
IC1251
12 LOUT
19 ROUT
L IN 1
R IN 30
SCL 16
SDA 17
SWITCH Q251
SWITCH Q1252
KV-S2941A, S2941B,S2941D,S294K only
KV-S2943E, S2942E only
IC1102
MICAM-DECORDER
4 SDA
3 SCL
1 PCLK
32 DATA
14 FMR
21 FML
X OUT 31
X IN 30
RESET 2
OPL 23
OPR 12
X1101
8.192MHz
BUFFER Q1104
D1102
VCD CAPACITOR
5V
D1101 RESET
L AUDIO AMP Q1105,1106
R AUDIO AHP Q1107,1108
IC1101
DEMODULATOR
1 CKLPF
3 QPSK IN
9 CARLPF
10 CAROSC
CLK IN 16
DATA 15
BP1101
BPF
SIF AMP Q1101,1102,1103
CF1101
CF1102
+5V
D1103
VCO CAPACITOR
X1102

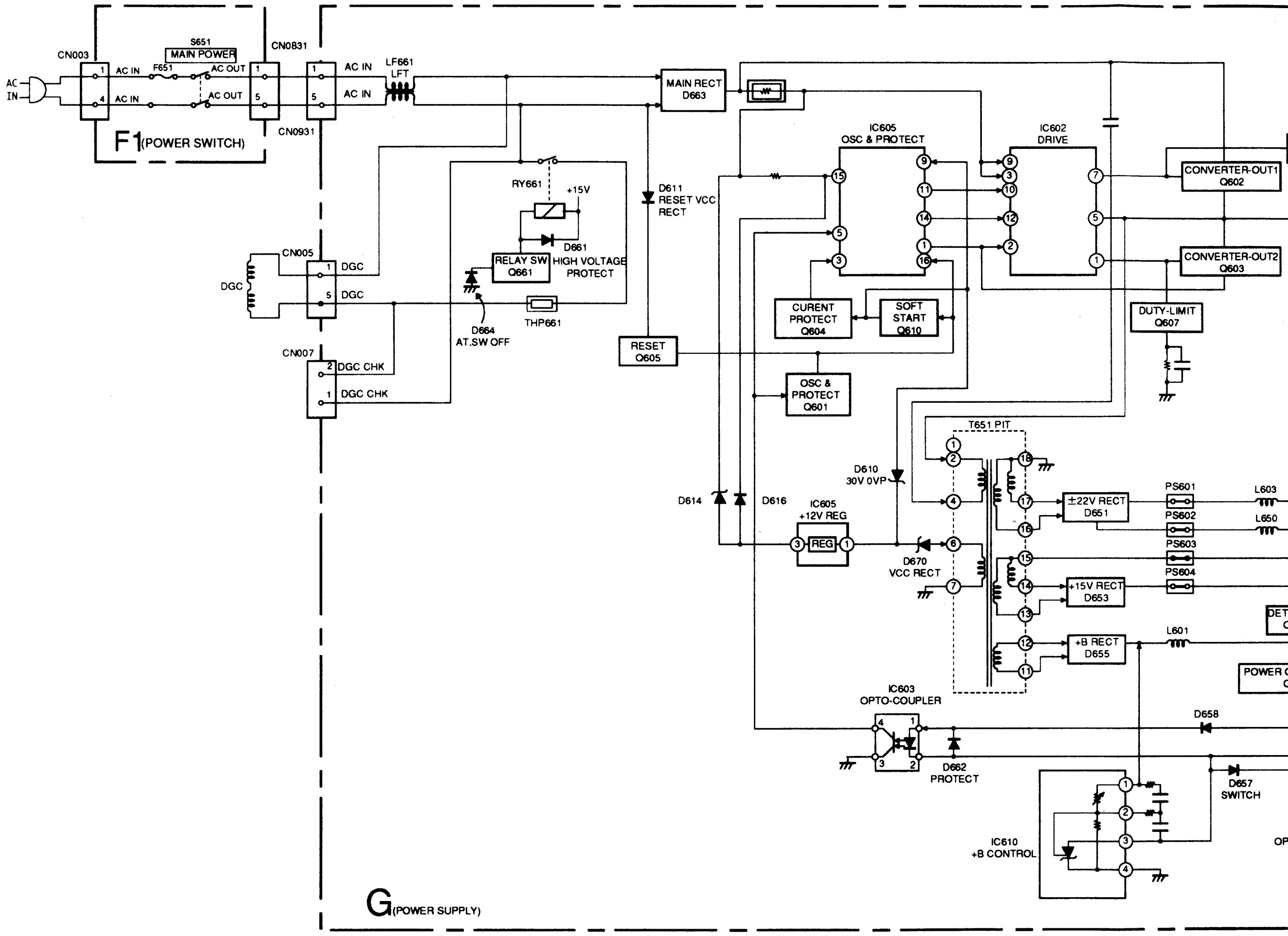
BLOCK DIAGRAMS (9)

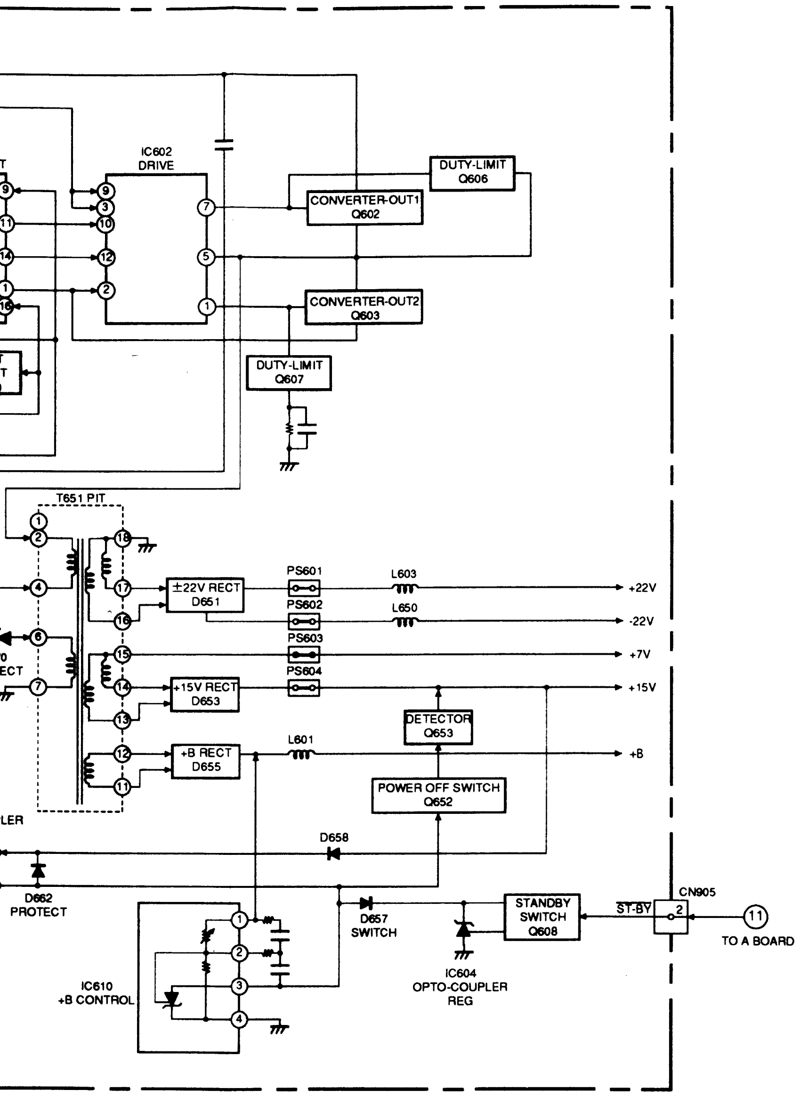

D (H. V OUT, PIN CORRECTION)
CN0523
TO D2 BOARD
⑱
7 H DRIVE
2 V-OUT
3 V-DY+
4 V-DY+
8 N/S
1 FBT 15V-P
+15V
RV1501
CN0502
TO D7 BOARD
㉖
ROTATION
CN0546
TO A BOARD
⑭
8 SSCP/100
11 VP 100S
10 H50
4 ROTATION
9 HP/100
7 CS/100
5 PROT
2 ABL
CN0544
TO D6 BOARD
⑲
1 SAW
10 VLC
6 ABL
2 PALA
FH
9 V S/S
7 VP/100
H OUT DRIVE
Q801
T801
HDT
H OUT
Q802
D801
SPEED UP
D802
H DAMPER
TM803
PMT
D803
H DAMPER
T803
PMT
L803
D804
PIN PROT
135V
L806 PMC
D819
IC801
DI MOD
PIN DRIVE
Q804
PIN OUT
Q803
L811
RIGHT 3
CENTER 2
LEFT 1
CN0009
D805 H CENT2
D806
H CENT 2
DY1
H+ 1
H+ 2
H- 3
H- 4
V- 5
V+ 6
DY
H DY
V DY
IC1501
V-OUT
DRV-IN
OUT PUT
REF-VOLT
+5V
V-R-P
Q1505
L1503
D810 G2 (1000V) RECT
CN521
G2 1
H1 4
H2 5
TO C BOARD
㉓
HV
㉔
TO PICTURE TUBE
+B
SWITCH DRIVE
Q805
V PROTECT
SWITCH
Q806
V PROTECT
Q1504
D1502
D1501
V PROTECT
Q1501
V PROTECT
Q1502
V PTOTECT
Q1503
D811
200V
RECT
C
+200V
200V
+135V
H2
H1
-15V
FBT 15V-P
+15V
D813
+15V RECT
+27V
L813
T806
DFT
FV
㉕
TO CJ701(G4) BOARD
ABL
T805
FBT
L816
IC2501
JUNGLE
12 HD
4 AFC PULSE
13 PROTECT
1 H SYNC
2 H PHASE
7 AFC
Vcc 10
H OSC1 8
H OSC2 9
D2501 D2502
+12V
D2501
VCC SUPPLY
RV2501
H-FREQ

BLOCK DIAGRAMS (10)

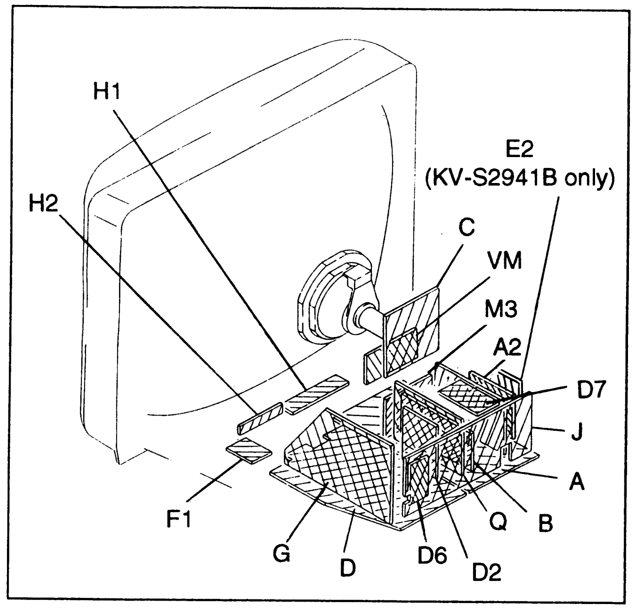

D6 (GEOMETRIE CONTROL, V. PARA AMP)
CN2044
PARA
FH
VP/100
V S/S
VLC
SAW
⑲
TO D BOARD
IC2581
V. PARA AMP
+5V
IC2561
GEOMETRIE - CONTROLLER
BLK
VSY
AFC
SCL
SDA
DIGITAL PART
ANALOG PART
H IN
PAR
SAW
XSOP
SOP
AVI
CN2050
SCL
SDA
ZOOM
WIDE
IK
⑫
TO A BOARD
BUFFER
Q2565
IC2562
BUFFER
IC2565
BUFFER
IC2563
5V REG
+12V
REG
+15V

BLOCK DIAGRAMS (11)


AC IN
CN003
AC IN
AC IN
S651
MAIN POWER
F651
AC OUT
AC OUT
CN0831
CN0931
F1 (POWER SWITCH)
AC IN
AC IN
LF661
LFT
MAIN RECT
D663
IC605
OSC & PROTECT
IC602
DRIVE
CONVERTER-OUT1
Q602
CONVERTER-OUT2
Q603
DUTY-LIMIT
Q607
RY661
+15V
D661
HIGH VOLTAGE PROTECT
RELAY SW
Q661
D611
RESET VCC RECT
CN005
DGC
DGC
DGC
D664
AT.SW OFF
THP661
CN007
DGC CHK
DGC CHK
RESET
Q605
CURENT PROTECT
Q604
SOFT START
Q610
OSC & PROTECT
Q601
T651 PIT
D610
30V 0VP
D614
D616
IC605
+12V REG
REG
D670
VCC RECT
±22V RECT
D651
+15V RECT
D653
+B RECT
D655
PS601
PS602
PS603
PS604
L603
L650
L601
IC603
OPTO-COUPLER
D662
PROTECT
D658
D657
SWITCH
IC610
+B CONTROL
G (POWER SUPPLY)


IC602
DRIVE
CONVERTER-OUT1
Q602
DUTY-LIMIT
Q606
CONVERTER-OUT2
Q603
DUTY-LIMIT
Q607
T651 PIT
±22V RECT
D651
PS601
PS602
PS603
PS604
L603
L650
+22V
-22V
+7V
+15V
+15V RECT
D653
DETECTOR
Q653
+B RECT
D655
L601
+B
POWER OFF SWITCH
Q652
D658
D662
PROTECT
D657
SWITCH
STANDBY
SWITCH
Q608
ST-BY
CN905
TO A BOARD
IC604
OPTO-COUPLER
REG
IC610
+B CONTROL
LER
ECT

5-2. CIRCUIT BOARDS LOCATION


H1
H2
E2
(KV-S2941B only)
C
VM
M3
A2
D7
J
A
B
Q
D2
D6
D
G
F1

5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in µF unless otherwise noted.
  pF: µµF 50WV or less are not indicated except for electrolytic and tantalums.
- All electrolytics are in 50V unless otherwise specified.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm
Rating electrical power 1/4W

- Chips resistors are 1/10W.
- All resistors are in ohms.
  kΩ=1000Ω, MΩ=1000KΩ
- ▭ : nonflammable resistor.
- ▭ : fusible resistor.
- △: internal component.
- ▭: panel designation, and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ⊥ : earth-ground. (cool)
- ⏚ : earth-chassis. (hot)

- All voltages are in V.
- Voltage are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 MΩ digital multimeter.
- Readings are taken with a PALcolour-bar signal input.
- Voltage variations may be noted due to normal production tolerance.
- Circled numbers are waveform references.
- ▭ : B+ line.
- ▭ : B– line.
- ▨ : signal path.

Reference information

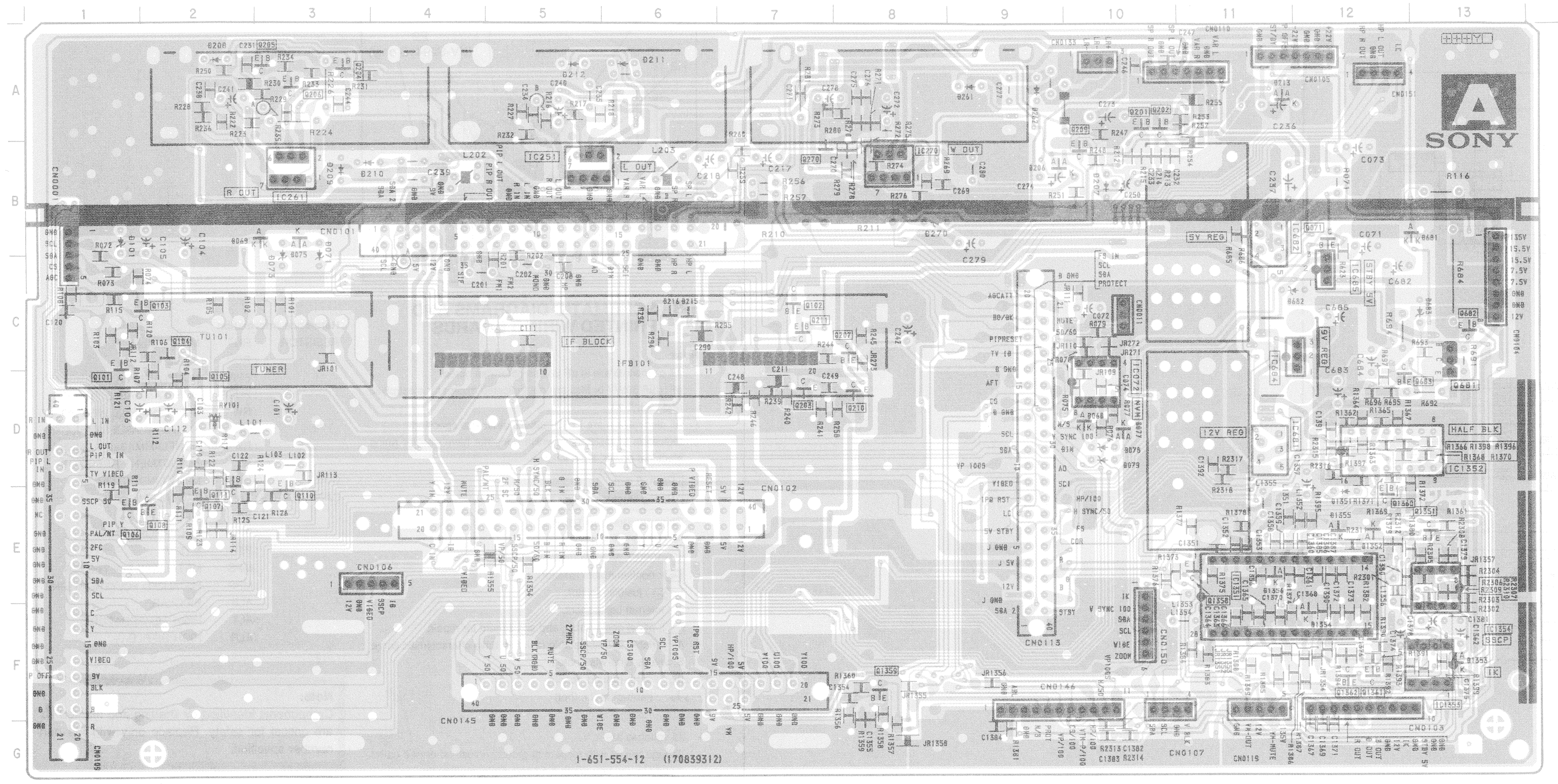
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: ※	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note:
Components identified by shading and marked ⚠ are critical for safety. Replace only with the part number specified.

Note:
Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

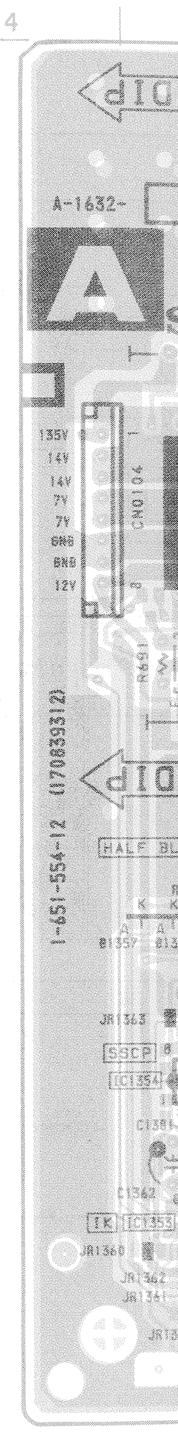
A [TUNER, SIF, VIF, RGB RECODER, V PULSE AMP, AUDIO AMP]

— A Board — <Conductor Side>



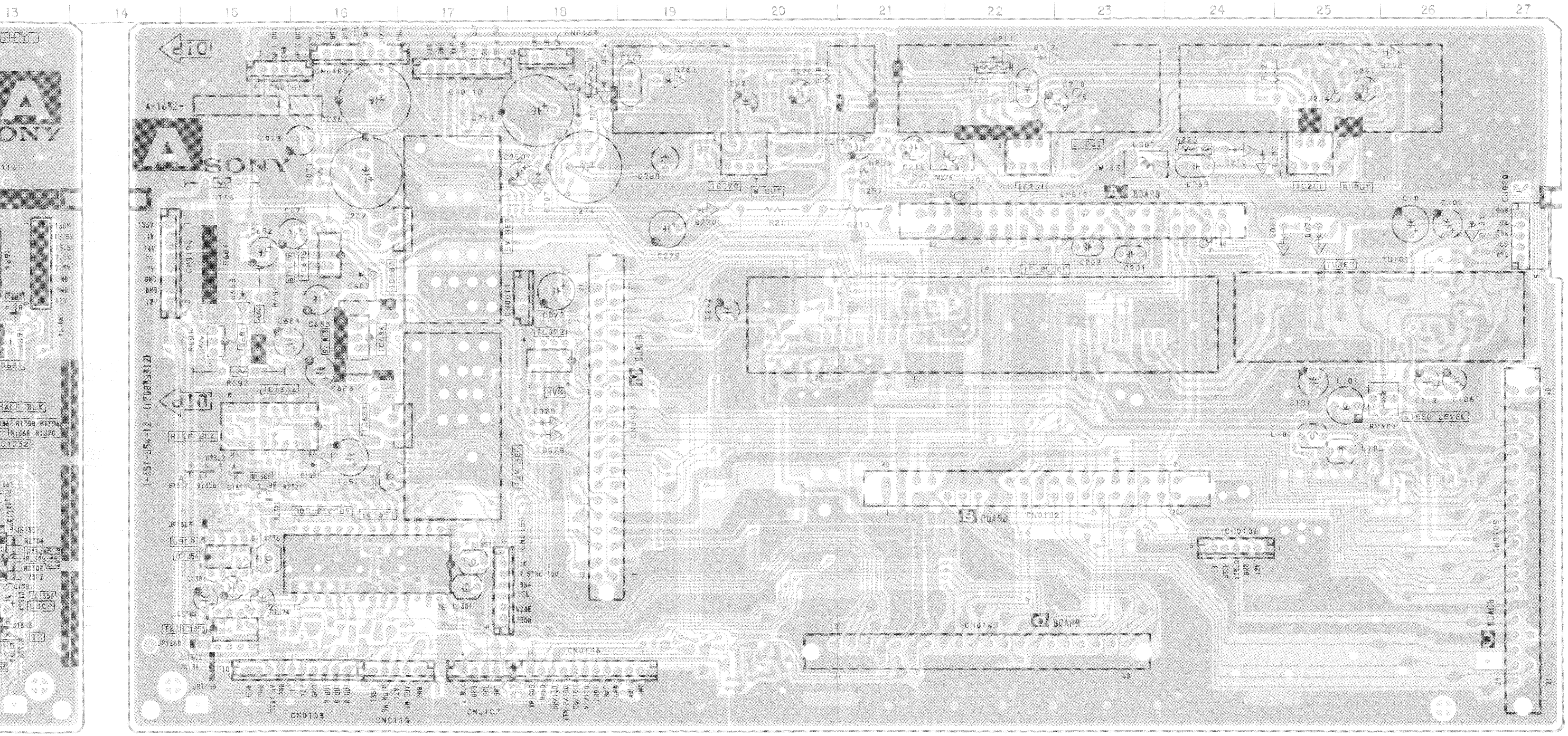
1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
A
SONY
TUNER
TU101
IF BLOCK
IFB101
CN0101
CN0102
CN0106
CN0113
CN0145
CN0146
CN0150
CN0107
CN0119
CN0103
CN0104
CN0105
CN0109
CN0110
CN0133
CN0151
IC251
IC261
IC270
IC682
IC685
IC684
IC681
IC1352
IC1354
R OUT
L OUT
W OUT
5V REG
12V REG
9V REG
STBY 5V
HALF BLK
SSCP
1-651-554-12 (170839312)

— A Board -



A-1632-
A
135V
14V
14V
7V
7V
GND
GND
12V
CN0104
1-651-554-12 (170839312)
HALF BLK
SSCP

— A Board — <Component Side>


13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
A-1632-
A SONY
1-651-554-12 (170839312)
CN0105
CN0151
CN0110
CN0133
CN0104
CN0101
CN0102
CN0103
CN0106
CN0107
CN0109
CN0113
CN0119
CN0145
CN0146
CN0150
CN0001
IC270
IC251
IC261
IC072
IC682
IC681
IC684
IC685
IC1351
IC1352
IC1353
IC1354
IFB101 IF BLOCK
TU101 TUNER
W OUT
L OUT
R OUT
VIDEO LEVEL
RV101
HALF BLK
RGB DECODE
SSCP
STBY 5V
5V REG
12V REG
BY REG
DIP
M BOARD
A BOARD
B BOARD
C BOARD
J BOARD

• ▨ : Pattern from the side which enables seeing.

• ▨ : Pattern of the rear side.

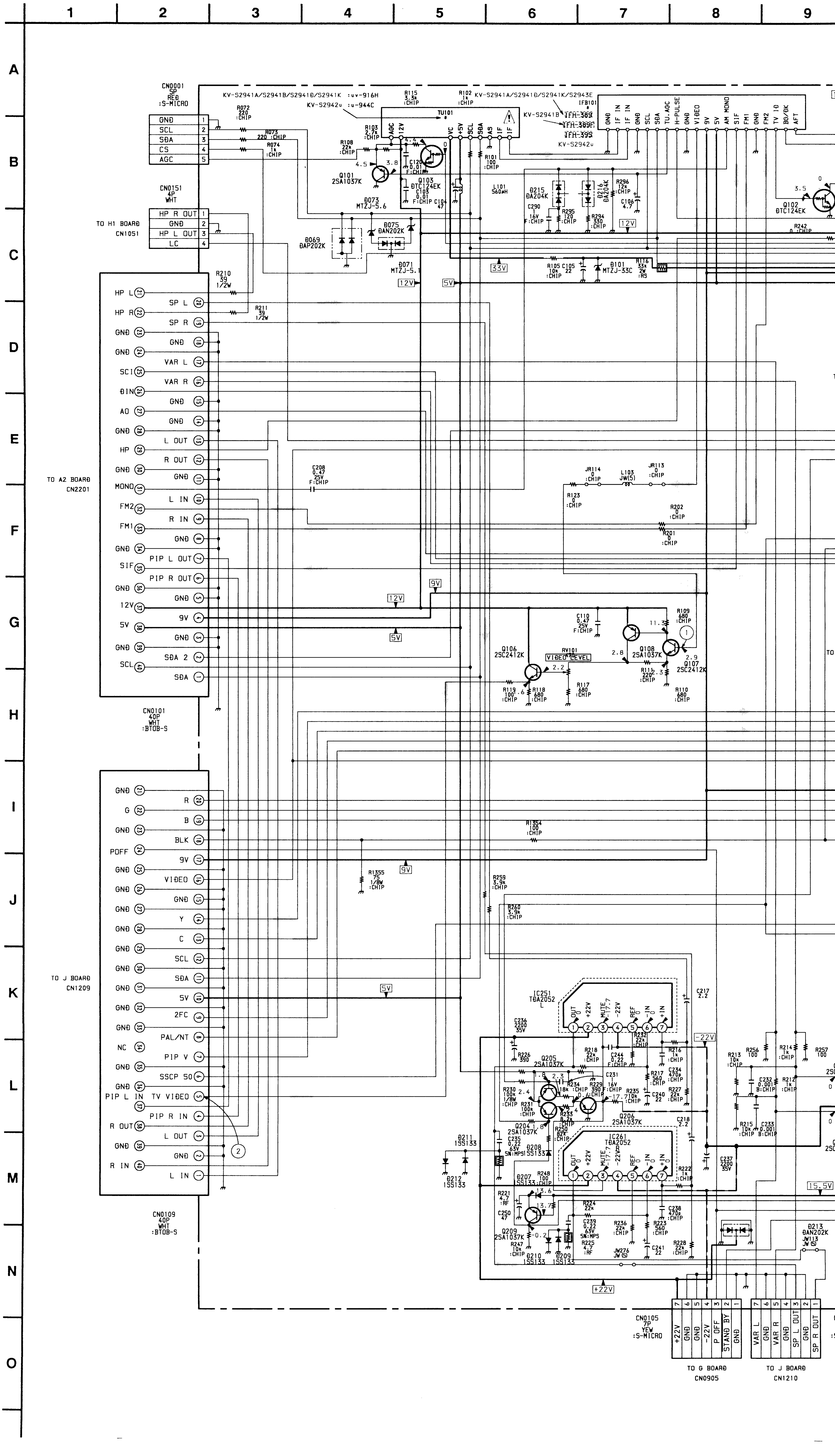
— A Board —

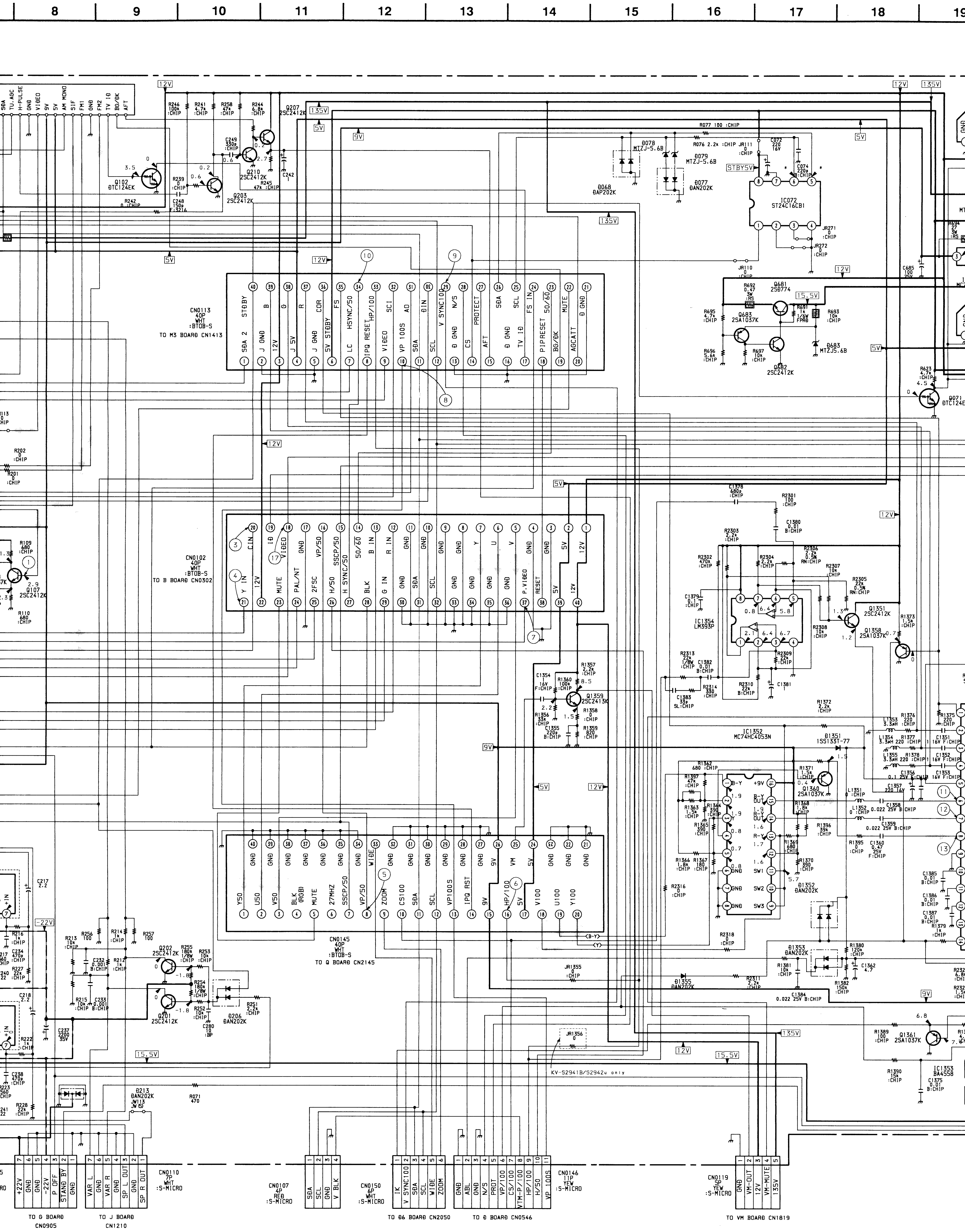
IC	
IC072	D-10
IC251	B-5
IC261	B-3
IC270	B-8
IC681	D-11
IC682	B-11
IC684	C-11
IC685	C-12
IC1351	E-11
IC1352	D-12
IC1353	F-13
IC1354	E-13

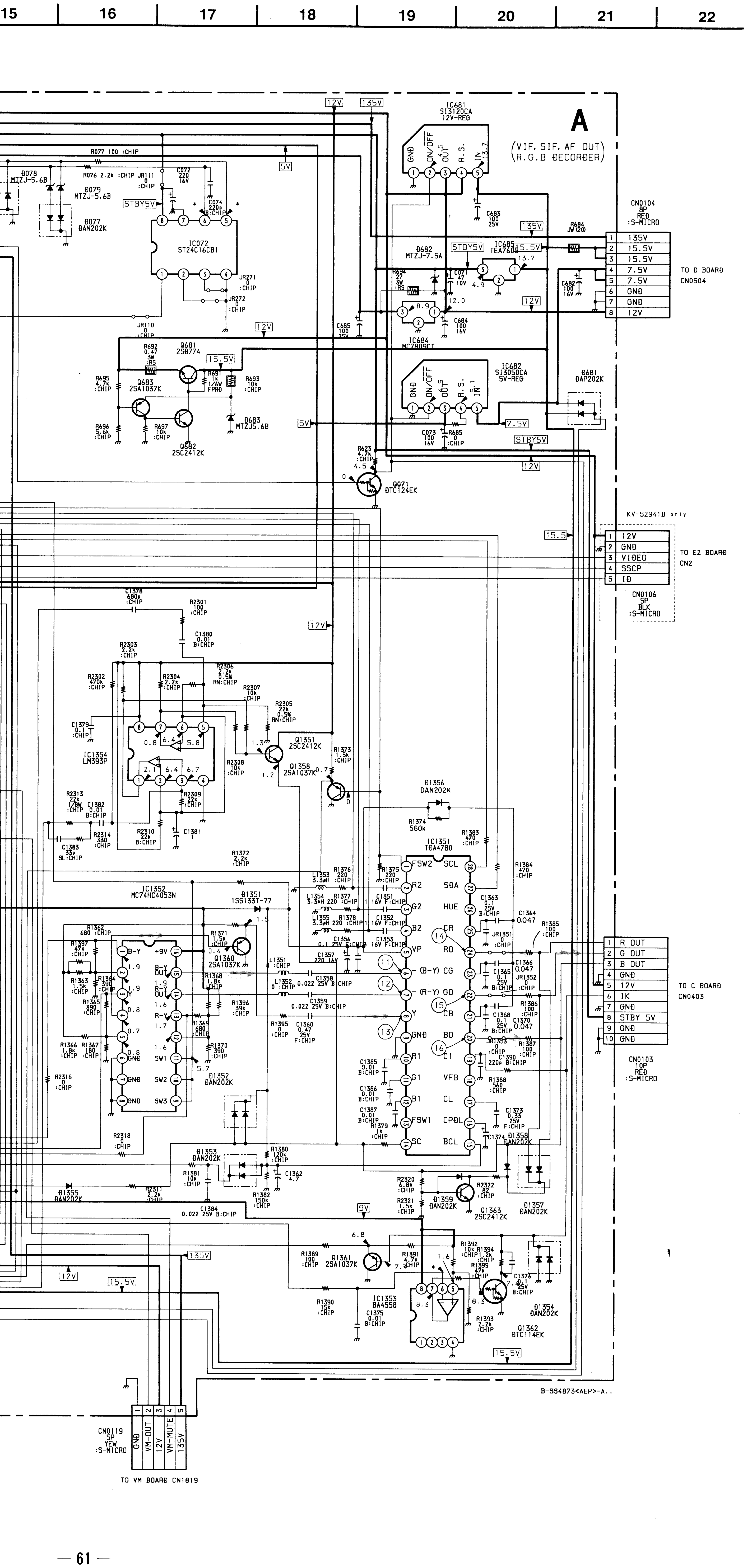
TRANSISTOR	
Q071	B-12
Q101	C-1
Q102	D-7
Q103	C-2
Q106	E-1
Q107	E-2
Q108	E-2
Q201	A-10
Q202	A-10
Q203	D-7
Q204	A-3
Q205	A-3
Q206	A-3
Q207	D-8
Q209	B-10
Q210	D-8
Q270	B-7
Q681	C-13
Q682	C-13
D683	D-12
Q1351	E-13
Q1358	E-11
Q1359	F-8
Q1360	E-12
Q1361	F-12
Q1362	F-12
Q1363	E-15

DIODE	
D068	D-10
D069	B-3
D071	B-3
D073	B-3
D075	B-3
D077	D-10
D078	D-10
D079	D-10
D101	B-1
D206	B-9
D207	B-10
D208	A-2
D209	B-3
D210	B-3
D211	A-6
D212	A-5
D213	A-11
D215	C-6
D216	C-6
D261	A-9
D262	A-9
D270	B-8
D681	B-13
D682	C-11
D683	C-12
D1351	E-11
D1352	E-12
D1353	F-13
D1354	F-12
D1355	E-12
D1356	E-11
D1357	E-15
D1358	E-15
D1359	E-15

VARIABLE RESISTOR	
RV101	D-2


1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
CN0001 5P RED :S-MICRO
GND
SCL
SDA
CS
AGC
KV-S2941A/S2941B/S2941D/S2941K :u-916H
KV-S2942u :u-944C
TU101
KV-S2941A/S2941D/S2941K/S2943E
IFB101
KV-S2941B
IFH-389
IFH-389F
IFH-395
KV-S2942u
CN0151 4P WHT
HP R OUT
HP L OUT
LC
TO H1 BOARD CN1051
Q101 2SA1037K
Q103 DTC124EK
D073 MTZJ-5.6
D075 DAN202K
D069 DAP202K
D071 MTZJ-5.1
L101 560uH
D215 DA204K
D216 DA204K
D101 MTZJ-33C
Q102 DTC124EK
12V
5V
9V
33V
TO A2 BOARD CN2201
CN0101 40P WHT :BTOB-S
HP L
HP R
SP L
SP R
VAR L
VAR R
SCI
DIN
AO
HP
MONO
FM2
FM1
SIF
L OUT
R OUT
L IN
R IN
PIP L OUT
PIP R OUT
SDA 2
SDA
Q106 2SC2412K
RV101 VIDEO LEVEL
Q108 2SA1037K
Q107 2SC2412K
TO J BOARD CN1209
CN0109 40P WHT :BTOB-S
R
G
B
BLK
POFF
VIDEO
Y
C
2FC
PAL/NT
NC
PIP V
SSCP 50
PIP L IN
TV VIDEO
PIP R IN
IC251 TDA2052
IC261 TDA2052
Q205 2SA1037K
Q204 2SA1037K
Q206 2SA1037K
Q209 2SA1037K
D208 1SS133
D207 1SS133
D211 1SS133
D212 1SS133
D210 1SS133
D209 1SS133
D213 DAN202K
-22V
+22V
15.5V
CN0105 7P YEW :S-MICRO
+22V
GND
GND
-22V
P OFF
STAND BY
GND
VAR L
GND
VAR R
GND
SP L OUT
GND
SP R OUT
TO G BOARD CN0905
TO J BOARD CN1210

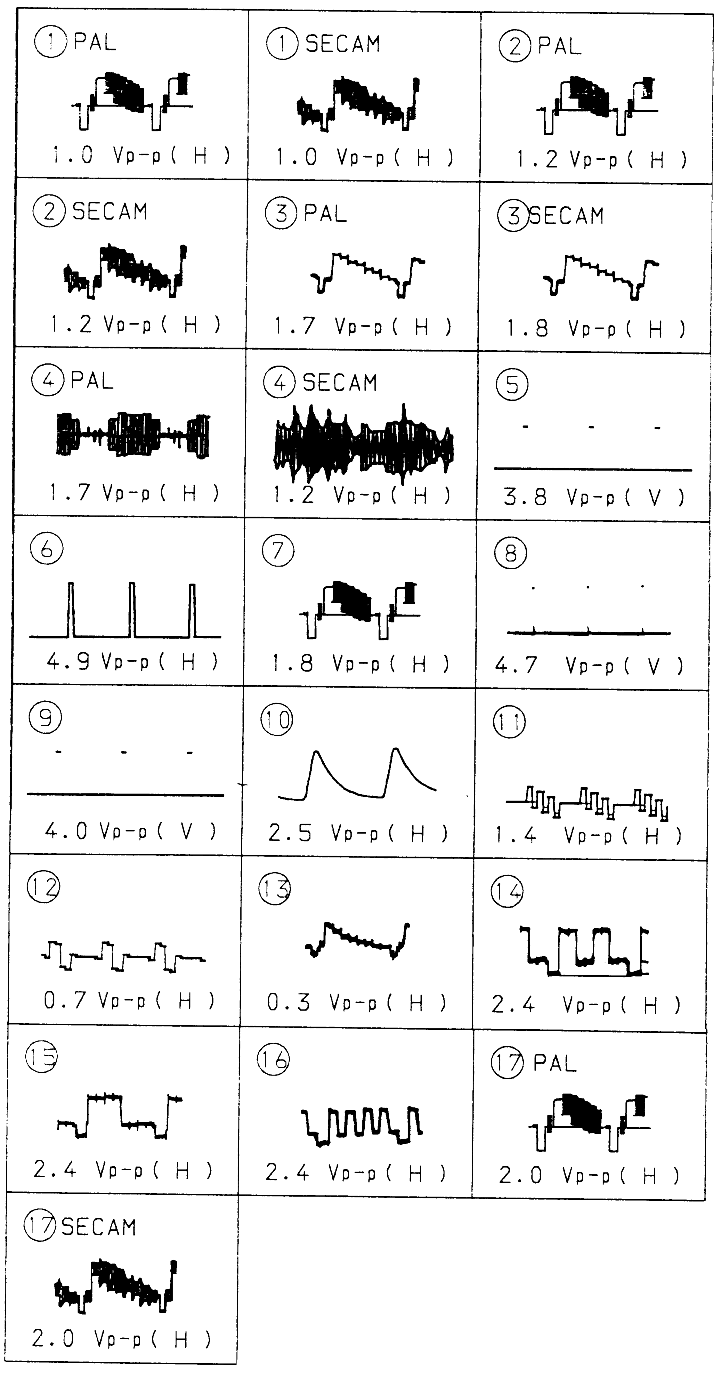
8
9
10
11
12
13
14
15
16
17
18
19
12V
135V
5V
9V
15.5V
-22V
STBY5V
SDA
TU.AGC
H-PULSE
GND
VIDEO
9V
5V
AM MONO
SIF
FM1
GND
FM2
TV ID
BG/DK
AFT
Q102 DTC124EK
Q203 2SC2412K
Q210 2SC2412K
Q207 2SC2412K
D068 DAP202K
D078 MTZJ-5.6B
D079 MTZJ-5.6B
D077 DAN202K
IC072 ST24C16CB1
R077 100 :CHIP
R076 2.2k :CHIP
Q681 2SB774
Q683 2SA1037K
Q682 2SC2412K
D683 MTZJ5.6B
Q071 DTC124E
CN0113 40P WHT :BTOB-S TO M3 BOARD CN1413
STBY
B
G
R
COR
FS
HSYNC/50
HP/100
SCL
AO
DIN
V SYNC100
N/S
PROTECT
SDA
SCL
FS IN
50/60
MUTE
D GND
SDA 2
J GND
12V
J 5V
J GND
5V STBY
LC
IPQ RESET
VIDEO
VP 100S
SDA
SCL
D GND
CS
AFT
D GND
TV ID
PIPRESET
BG/DK
AGCATT
CN0102 40P WHT :BTOB-S TO B BOARD CN0302
C IN
ID
VIDEO
GND
VP/50
SSCP/50
50/60
B IN
R IN
GND
Y
U
V
5V
12V
Y IN
MUTE
PAL/NT
2FSC
H/50
H SYNC/50
BLK
G IN
P.VIDEO
RESET
Q107 2SC2412K
Q1359 2SC2413K
IC1354 LM393P
Q1351 2SC2412K
Q1358 2SA1037K
IC1352 MC74HC4053N
D1351 1SS133T-77
Q1360 2SA1037K
D1352 DAN202K
D1353 DAN202K
D1355 DAN202K
B-Y
R-Y
+9V
B-Y OUT
R-Y OUT
SW1
SW2
SW3
CN0145 40P WHT :BTOB-S TO Q BOARD CN2145
Y50
U50
V50
BLK (RGB)
27MHZ
SSCP/50
VP/50
WIDE
ZOOM
CS100
VP100S
IPQ RST
9V
HP/100
VM
V100
U100
Y100
Q202 2SC2412K
Q201 2SC2412K
D206 DAN202K
D213 DAN202K
R071 470
Q1361 2SA1037K
IC1353 BA4558
KV-S2941B/S2942u only
CN0110 7P WHT :S-MICRO
+22V
GND
GND
-22V
P OFF
STAND BY
GND
TO G BOARD CN0905
VAR L
GND
VAR R
GND
SP L OUT
GND
SP R OUT
TO J BOARD CN1210
CN0107 4P RED :S-MICRO
SDA
SCL
GND
V BLK
CN0150 6P WHT :S-MICRO
IK
V SYNC100
SDA
SCL
WIDE
ZOOM
TO D6 BOARD CN2050
GND
ABL
GND
N/S
PROT
VP/100
CS/100
VTM-P/100
HP/100
H/50
VP 100S
CN0146 11P YEW :S-MICRO
TO D BOARD CN0546
CN0119 5P YEW :S-MICRO
GND
VM-OUT
12V
VM-MUTE
135V
TO VM BOARD CN1819


15
16
17
18
19
20
21
22
A
(VIF, SIF, AF OUT)
(R.G.B DECORDER)
12V
135V
5V
STBY5V
15.5V
7.5V
9V
IC681
SI3120CA
12V-REG
IC682
SI3050CA
5V-REG
IC684
MC7809CT
IC685
TEA7605
IC072
ST24C16CB1
D078
MTZJ-5.6B
D079
MTZJ-5.6B
D077
DAN202K
D682
MTZJ-7.5A
Q681
2SD774
Q683
2SA1037K
Q682
2SC2412K
D683
MTZJ5.6B
D681
DAP202K
Q071
DTC124EK
CN0104
8P
RED
:S-MICRO
1 135V
2 15.5V
3 15.5V
4 7.5V
5 7.5V
6 GND
7 GND
8 12V
TO D BOARD
CN0504
KV-S2941B only
1 12V
2 GND
3 VIDEO
4 SSCP
5 ID
CN0106
5P
BLK
:S-MICRO
TO E2 BOARD
CN2
IC1354
LM393P
Q1351
2SC2412K
Q1358
2SA1037K
D1356
DAN202K
IC1351
TDA4780
IC1352
MC74HC4053N
D1351
1SS133T-77
Q1360
2SA1037K
D1352
DAN202K
D1353
DAN202K
D1355
DAN202K
D1359
DAN202K
Q1363
2SC2412K
D1357
DAN202K
D1358
DAN202K
Q1361
2SA1037K
IC1353
BA4558
Q1359
Q1362
DTC114EK
D1354
DAN202K
1 R OUT
2 G OUT
3 B OUT
4 GND
5 12V
6 IK
7 GND
8 STBY 5V
9 GND
10 GND
TO C BOARD
CN0403
CN0103
10P
RED
:S-MICRO
1 GND
2 VM-OUT
3 12V
4 VM-MUTE
5 135V
CN0119
5P
YEW
:S-MICRO
TO VM BOARD CN1819
B-SS4873<AEP>-A..

— A Board —

Ref. No.	Name	Function	Ref. No.	
IC072	ST24C16CB1	16K EPROM	D068	DA
IC251	TDA2052	AF AMP L	D069	DA
IC261	TDA2052	AF AMP R	D071	MIJ
IC270	TDA2052	AUDIO AMP F SUB WOOFER	D073	MIJ
IC681	SI3120CA	12V REG	D075	DA
IC682	SI3050CA	5V REG	D077	DA
IC684	MC7809CT	9V REG	D078	MT
IC685	TEA7605	STDBY 5V REG	D079	MT
IC1351	TDA4780	RGB DECODER	D101	MT
IC1352	MC74HC4053N	DELAY LINE	D206	DA
IC1353	BA4558	V PULSE AMP	D207	1S
IC1354	LM393P	H PULSE AMP	D208	1S
			D209	1S
Q071	DTC124EK	STANDBY SWITCH	D210	1S
Q101	2SA1037K	AGC	D211	1S
Q102	DTC124EK	INVERTER	D212	1S
Q103	DTC124EK	AUTO RESET	D213	DA
Q106	2SC2412K	VIDEO BUFFER	D215	DA
Q107	2SC2412K	VIDEO AMP	D216	DA
Q108	2SA1037K	VIDEO CLAMP	D261	1S
Q201	2SC2412K	MUTE SWITCH	D262	1S
Q202	2SC2412K	MUTE SWITCH	D270	MT
Q203	2SC2412K	H PULSE AMP	D681	DA
Q204	2SA1037K	STANDBY SWITCH	D682	MT
Q205	2SA1037K	MUTE SWITCH	D683	MT
Q206	2SA1037K	MUTE SWITCH	D1351	1S
Q207	2SC2412K	AFT BUFFER	D1352	DA
Q209	2SA1037K	MUTE SWITCH	D1353	DA
Q210	2SC2412K	SWITCH	D1354	DA
Q270	2SC2412K	AUDIO MIX	D1355	DA
Q681	2SD774	REG SWITCH	D1356	DA
Q682	2SC2412K	REG SWITCH	D1357	DA
Q683	2SA1037K	REG SWITCH	D1358	DA
Q1351	2SC2412K	H PULSE BUFFER	D1359	DA
Q1358	2SA1037K	VM MUTE		
Q1359	2SC2412K	VM OUT		
Q1360	2SA1037K	Y BUFFER		
Q1361	2SA1037K	IK BUFFER		
Q1362	DTC114EK	IK SWITCH		
Q1363	2SC2412K	IK AMP		

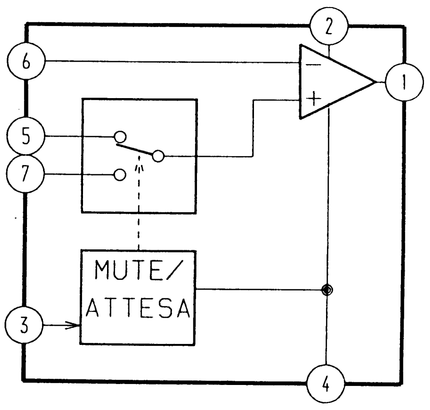
— A Board —



— A Board —

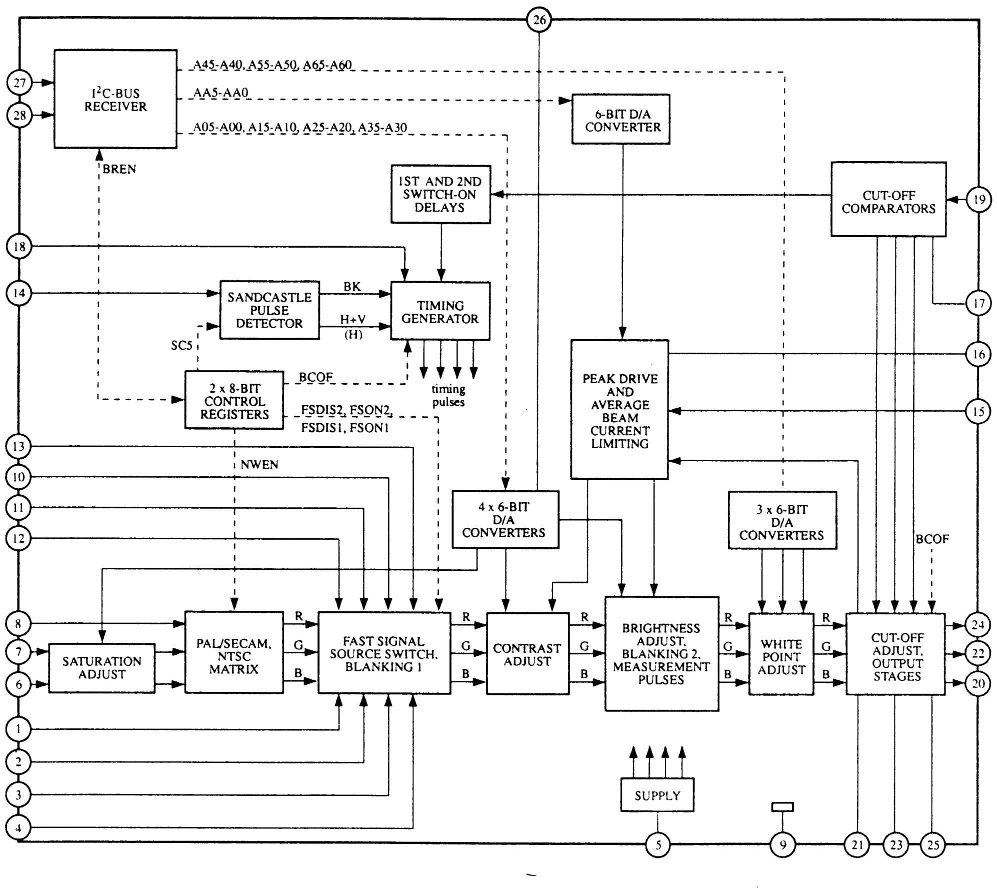
Ref. No.	Name	Function	Ref. No.	Name	Function
IC072	ST24C16CB1	16K EPROM	D068	DAP202K	PROTECTOR
IC251	TDA2052	AF AMP L	D069	DAP202K	PROTECTOR
IC261	TDA2052	AF AMP R	D071	MIJZ-T-77-5,6B	PROTECTOR
IC270	TDA2052	AUDIO AMP F SUB WOOFER	D073	MIJZ-T-77-5,6B	PROTECTOR
IC681	SI3120CA	12V REG	D075	DAN202K	PROTECTOR
IC682	SI3050CA	5V REG	D077	DAN202K	PROTECTOR
IC684	MC7809CT	9V REG	D078	MTJZ-T-77-5,6B	PROTECTOR
IC685	TEA7605	STDBY 5V REG	D079	MTJZ-T-77-5,6B	PROTECTOR
IC1351	TDA4780	RGB DECODER	D101	MTZJ-T-77-33C	+33V REG
IC1352	MC74HC4053N	DELAY LINE	D206	DAN202K	MUTE
IC1353	BA4558	V PULSE AMP	D207	1SS133T	SWITCH
IC1354	LM393P	H PULSE AMP	D208	1SS133T	SWITCH
			D209	1SS133T	PROTECT
Q071	DTC124EK	STANDBY SWITCH	D210	1SS133T	PROTECT
Q101	2SA1037K	AGC	D211	1SS133T	PROTECT
Q102	DTC124EK	INVERTER	D212	1SS133T	PROTECT
Q103	DTC124EK	AUTO RESET	D213	DAN202K	PROTECT
Q106	2SC2412K	VIDEO BUFFER	D215	DA204K	PROTECT
Q107	2SC2412K	VIDEO AMP	D216	DA204K	PROTECT
Q108	2SA1037K	VIDEO CLAMP	D261	1SS133T	PROTECT
Q201	2SC2412K	MUTE SWITCH	D262	1SS133T	PROTECT
Q202	2SC2412K	MUTE SWITCH	D270	MTZJ-T-77-9,1	PROTECT
Q203	2SC2412K	H PULSE AMP	D681	DAP202K	PROTECT
Q204	2SA1037K	STANDBY SWITCH	D682	MTZJ-T-77-7,5A	5V REG REF
Q205	2SA1037K	MUTE SWITCH	D683	MTZJ-J-77-5,6B	REF
Q206	2SA1037K	MUTE SWITCH	D1351	1SS133T	8V REG REF
Q207	2SC2412K	AFT BUFFER	D1352	DAN202K	LIMITTER
Q209	2SA1037K	MUTE SWITCH	D1353	DAN202K	RECT
Q210	2SC2412K	SWITCH	D1354	DAN202K	PROTECT
Q270	2SC2412K	AUDIO MIX	D1355	DAN202K	SWITCH
Q681	2SD774	REG SWITCH	D1356	DAN202K	LIMITTER
Q682	2SC2412K	REG SWITCH	D1357	DAN202K	LIMITTER
Q683	2SA1037K	REG SWITCH	D1358	DAN202K	LIMITTER
Q1351	2SC2412K	H PULSE BUFFER	D1359	DAN202K	SWITCH
Q1358	2SA1037K	VM MUTE			
Q1359	2SC2412K	VM OUT			
Q1360	2SA1037K	Y BUFFER			
Q1361	2SA1037K	IK BUFFER			
Q1362	DTC114EK	IK SWITCH			
Q1363	2SC2412K	IK AMP			

A BOARD IC251,261,270 TDA2052



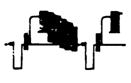
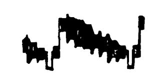
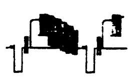
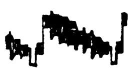
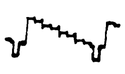
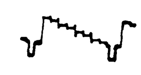
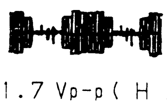
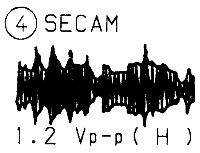
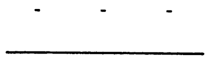
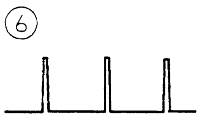
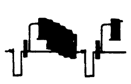
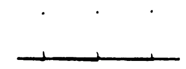
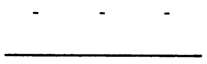
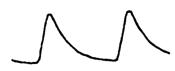
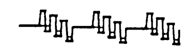
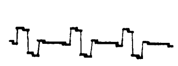
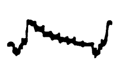
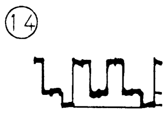
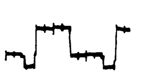
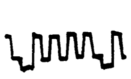
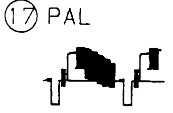
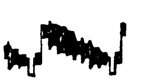
2
6
1
5
7
MUTE/ ATTESA
3
4

A BOARD IC1351 TDA4780

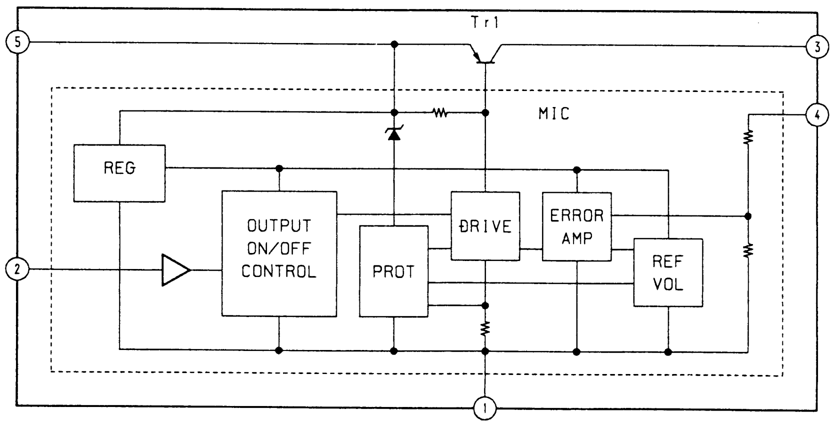


26
27
28
I²C-BUS RECEIVER
A45-A40, A55-A50, A65-A60
AA5-AA0
A05-A00, A15-A10, A25-A20, A35-A30
6-BIT D/A CONVERTER
BREN
1ST AND 2ND SWITCH-ON DELAYS
CUT-OFF COMPARATORS
19
18
14
SANDCASTLE PULSE DETECTOR
BK
H+V (H)
TIMING GENERATOR
17
SC5
2 x 8-BIT CONTROL REGISTERS
BCOF
FSDIS2, FSON2, FSDIS1, FSON1
timing pulses
PEAK DRIVE AND AVERAGE BEAM CURRENT LIMITING
16
15
13
NWEN
10
11
12
4 x 6-BIT D/A CONVERTERS
3 x 6-BIT D/A CONVERTERS
BCOF
8
7
6
SATURATION ADJUST
PAL/SECAM, NTSC MATRIX
R
G
B
FAST SIGNAL SOURCE SWITCH, BLANKING 1
CONTRAST ADJUST
BRIGHTNESS ADJUST, BLANKING 2, MEASUREMENT PULSES
WHITE POINT ADJUST
CUT-OFF ADJUST, OUTPUT STAGES
24
22
20
1
2
3
4
SUPPLY
5
9
21
23
25

— A Board —

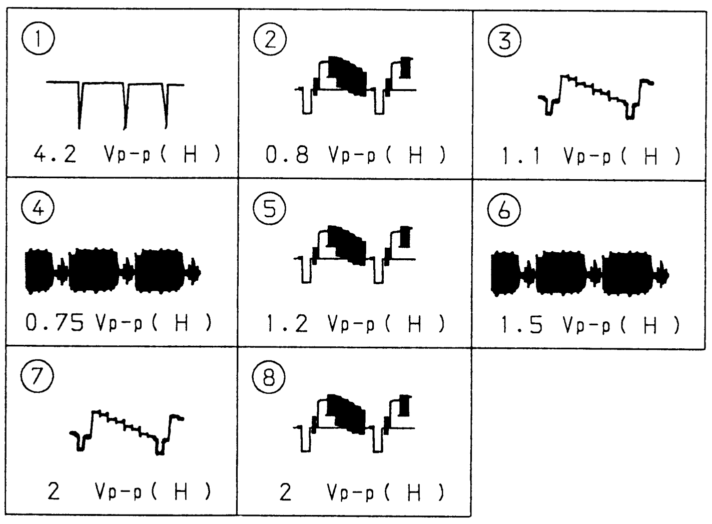
① PAL  1.0 Vp-p (H)	① SECAM  1.0 Vp-p (H)	② PAL  1.2 Vp-p (H)
② SECAM  1.2 Vp-p (H)	③ PAL  1.7 Vp-p (H)	③SECAM  1.8 Vp-p (H)
④ PAL  1.7 Vp-p (H)	④ SECAM  1.2 Vp-p (H)	⑤  3.8 Vp-p (V)
⑥  4.9 Vp-p (H)	⑦  1.8 Vp-p (H)	⑧  4.7 Vp-p (V)
⑨  4.0 Vp-p (V)	⑩  2.5 Vp-p (H)	⑪  1.4 Vp-p (H)
⑫  0.7 Vp-p (H)	⑬  0.3 Vp-p (H)	⑭  2.4 Vp-p (H)
⑮  2.4 Vp-p (H)	⑯  2.4 Vp-p (H)	⑰ PAL  2.0 Vp-p (H)
⑰SECAM  2.0 Vp-p (H)		

A BOARD IC681 SI3120CA



Tr1
5
3
MIC
4
REG
OUTPUT ON/OFF CONTROL
DRIVE
ERROR AMP
2
PROT
REF VOL
1

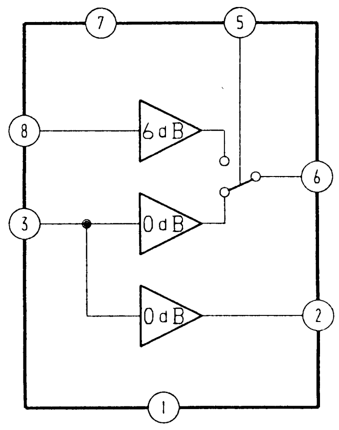
— J Board —



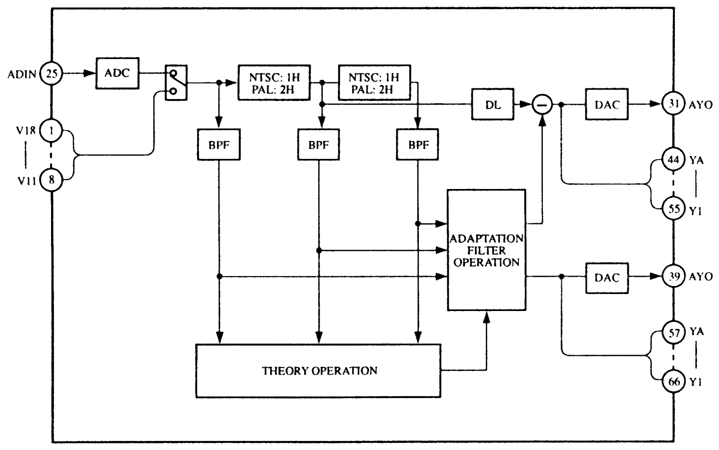
— J Board —

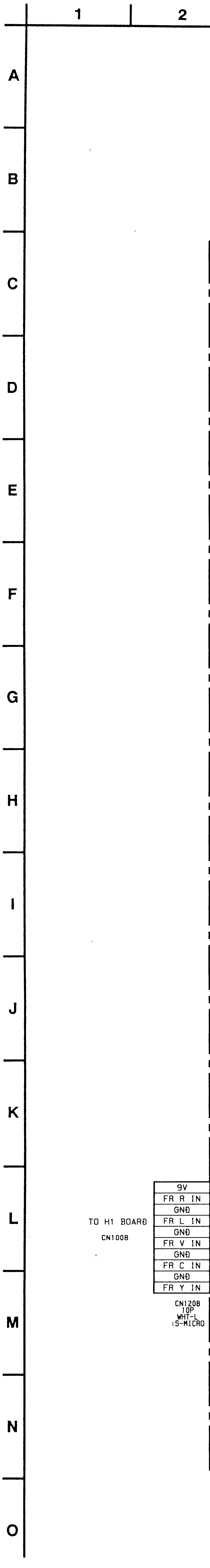
Ref. No.	Name	Function
IC401	CXA1545AS	A/V SWITCH
IC402	TEA2114	BUFFER
IC1301	CXD2024Q-TL	DIGITAL COMB
Q401	2SC2412K	CHROMA BUFFER
Q402	2SC2412K	Y BUFFER
Q403	2SC2412K	VIDEO BUFFER
Q404	2SC2412K	VIDEO BUFFER
Q1301	2SA1037K	FREQUENCY DOUBLER
Q1302	2SA1037K	FREQUENCY DOUBLER
Q1303	2SA1037K	FREQUENCY DOUBLER
Q1304	2SC2412K	PULSE FORMER
Q1305	2SC2412K	VIDEO BUFFER
Q1306	2SC2412K	VIDEO BUFFER
Q1307	2SA1037K	Y AMP
Q1308	2SA1037K	Y BUFFER
Q1309	2SC2412K	CHROMA AMP
Q1311	2SC2412K	CHROMA BUFFER
Q1312	2SA1037K	CLAMP
Q1313	2SC2412K	Y AMP
Q1314	2SA1037K	Y BUFFER
Q1315	2SA1037K	Y BUFFER
D401	MTZJ-9.1	PROTECTOR
D403	MTZJ-9.1	PROTECTOR
D405	MTZJ-9.1	PROTECTOR
D406	MTZJ-9.1	PROTECTOR
D407	MTZJ-9.1	PROTECTOR
D901	MTZJ-9.1	PROTECTOR
D902	MTZJ-9.1	PROTECTOR
D903	MTZJ-9.1	PROTECTOR
D904	MTZJ-9.1	PROTECTOR
D905	MTZJ-9.1	PROTECTOR
D906	MTZJ-9.1	PROTECTOR
D907	MTZJ-9.1	PROTECTOR
D908	MTZJ-9.1	PROTECTOR
D909	MTZJ-9.1	PROTECTOR
D910	MTZJ-9.1	PROTECTOR
D911	MTZJ-9.1	PROTECTOR
D913	MTZJ-9.1	PROTECTOR
D914	MTZJ-9.1	PROTECTOR
D915	MTZJ-9.1	PROTECTOR
D916	MTZJ-9.1	PROTECTOR
D917	MTZJ-9.1	PROTECTOR
D919	MTZJ-9.1	PROTECTOR
D920	MTZJ-9.1	PROTECTOR
D921	MTZJ-9.1	PROTECTOR
D922	MTZJ-9.1	PROTECTOR
D923	MTZJ-9.1	PROTECTOR
D924	MTZJ-9.1	PROTECTOR
D925	MTZJ-9.1	PROTECTOR
D926	MTZJ-9.1	PROTECTOR
D927	MTZJ-9.1	PROTECTOR
D928	MTZJ-9.1	PROTECTOR
D930	MTZJ-9.1	PROTECTOR
D931	MTZJ-9.1	PROTECTOR
D932	MTZJ-9.1	PROTECTOR
D1301	DAN202K	PROTECTOR

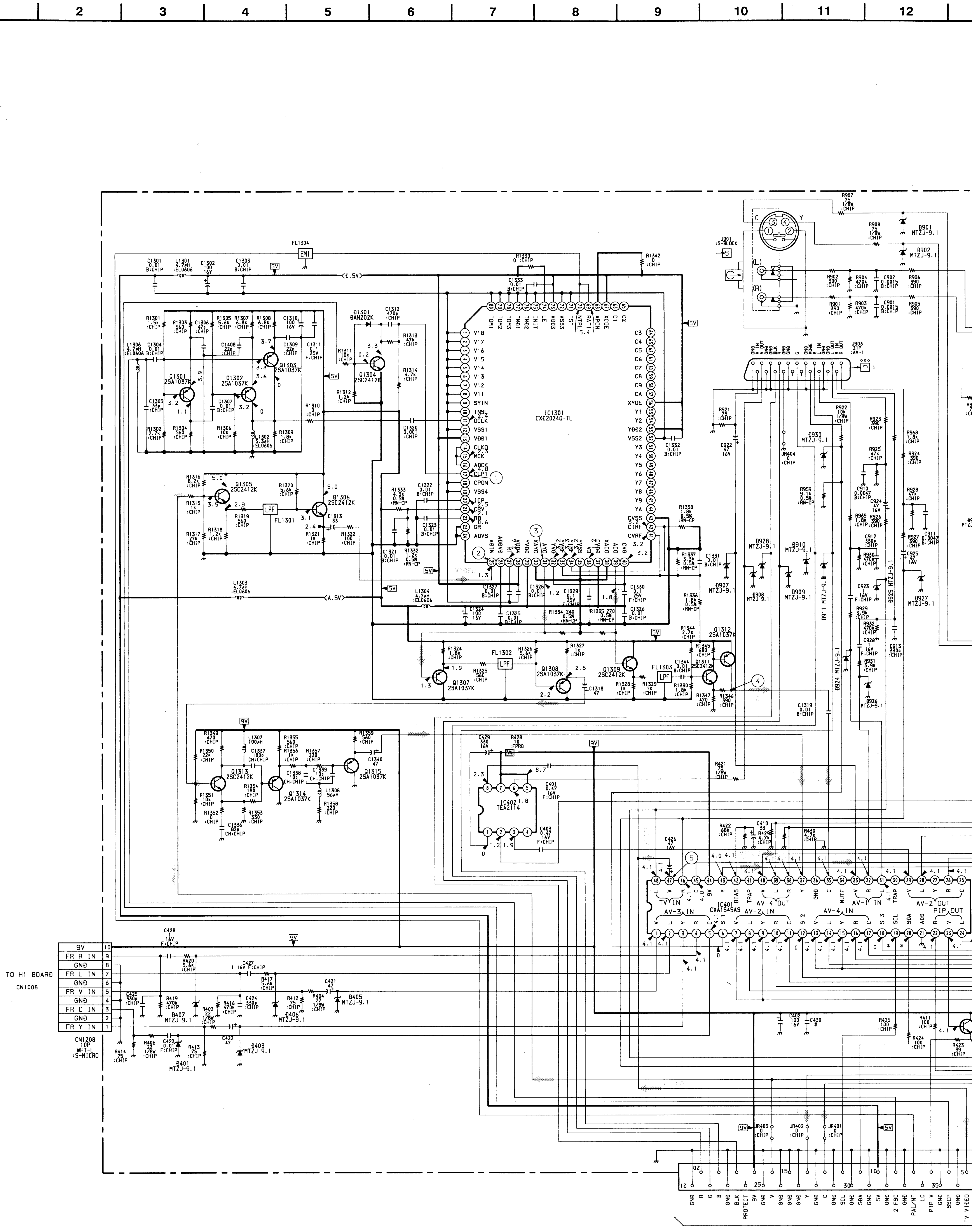
J BOARD IC402 TEA2114


7
5
8
6dB
6
3
0dB
0dB
2
1

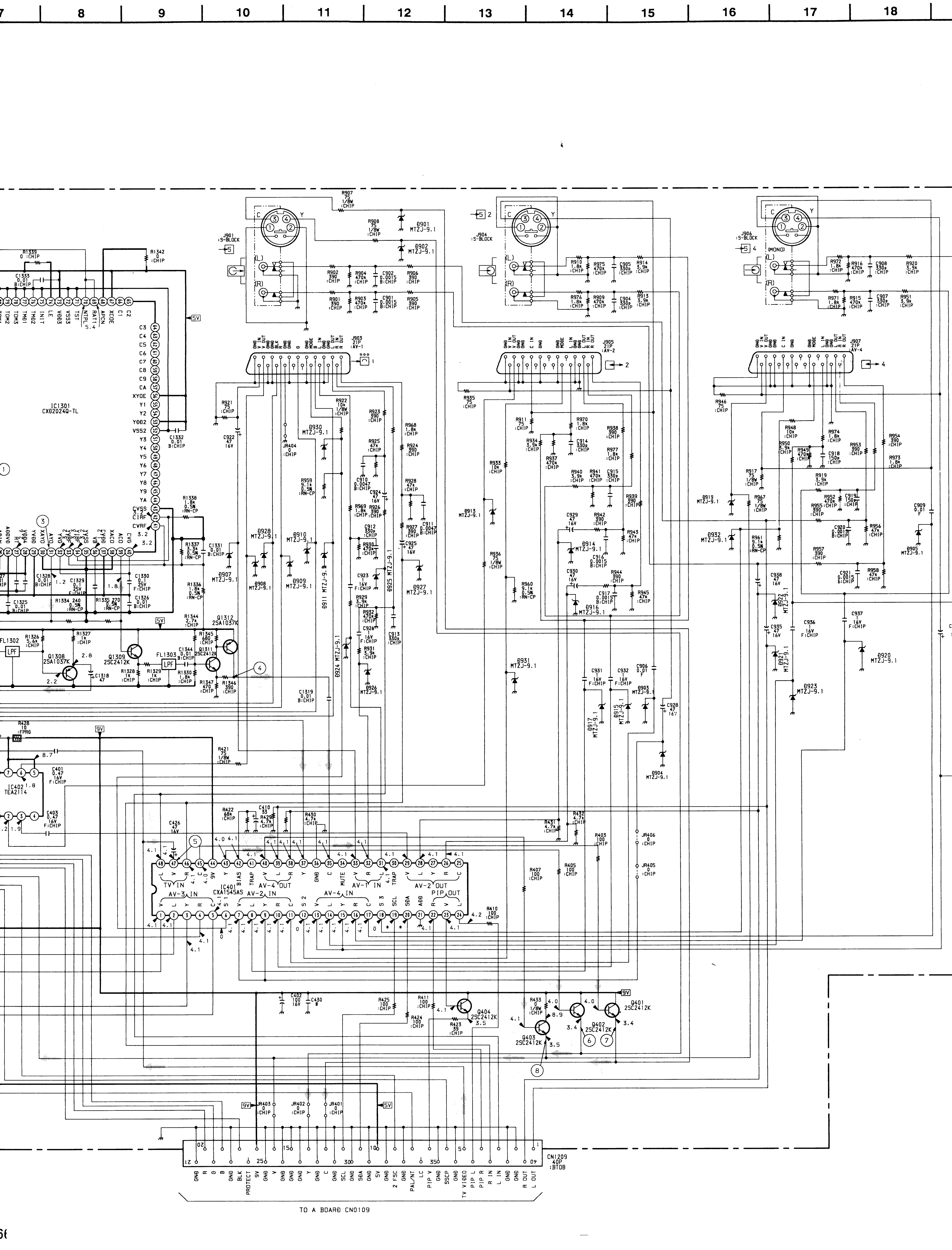
J BOARD IC1301 CXD2024Q-TL


ADIN
25
ADC
V18
1
V11
8
NTSC: 1H
PAL: 2H
NTSC: 1H
PAL: 2H
BPF
BPF
BPF
DL
DAC
31
AYO
44
YA
55
Y1
ADAPTATION
FILTER
OPERATION
DAC
39
AYO
57
YA
66
Y1
THEORY OPERATION

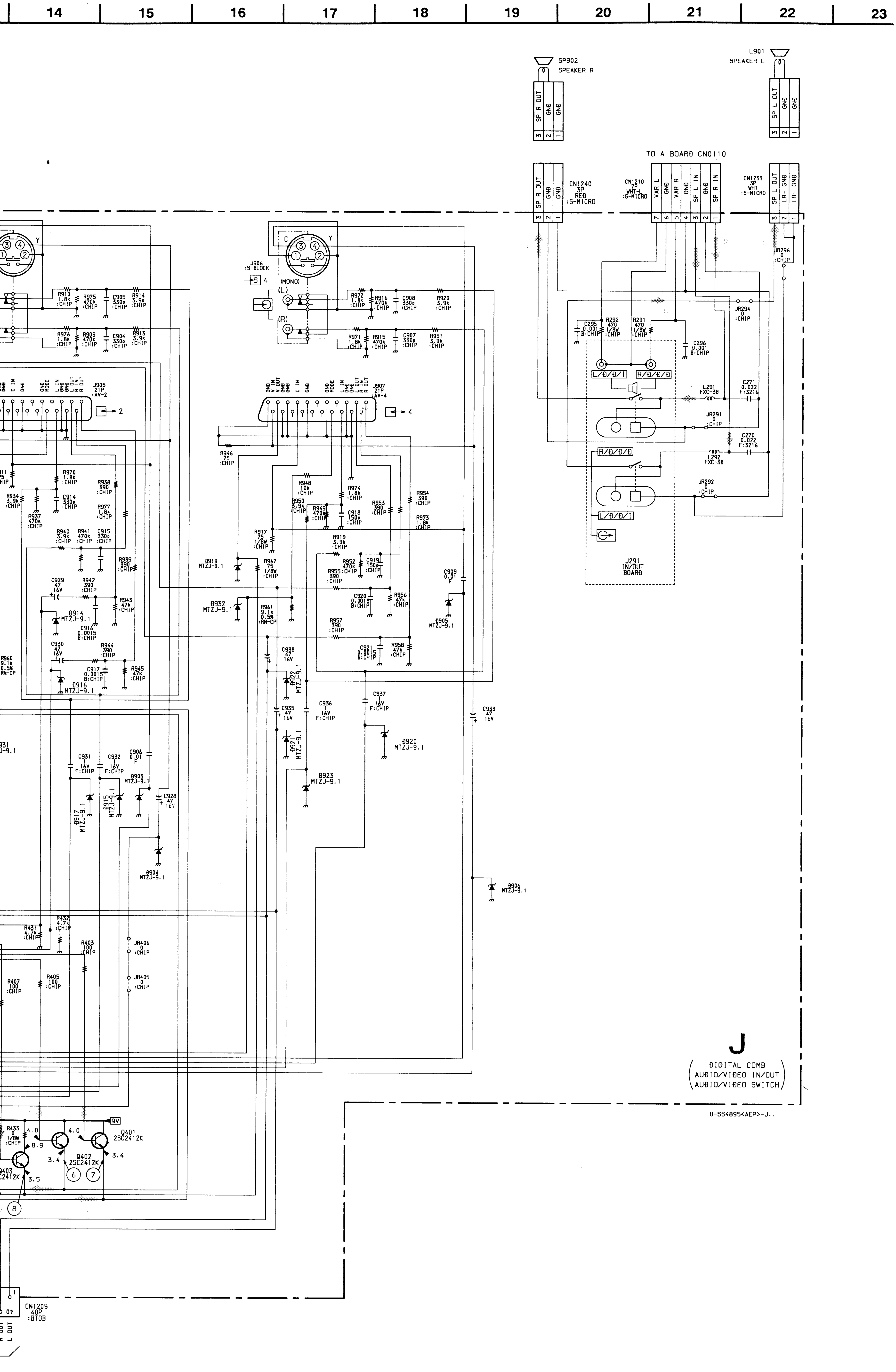

1
2
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
TO H1 BOARD
CN1008
9V
FR R IN
GND
FR L IN
GND
FR V IN
GND
FR C IN
GND
FR Y IN
CN1208
10P
WHT-L
:S-MICRO



2
3
4
5
6
7
8
9
10
11
12
FL1304
EMI
C1301 0.01 B:CHIP
L1301 4.7µH :EL0606
C1302 100 16V
C1303 0.01 B:CHIP
5V
(0.5V)
R1339 0 :CHIP
C1333 0.01 B:CHIP
R1342 0 :CHIP
IC1301 CXD2024Q-TL
V18
V17
V16
V15
V14
V13
V12
V11
SYIN
INSL
VSS1
VDD1
CLKO
MCK
ADCK
CLP1
CPON
VSS4
ICP
CBV
RB
GR
ADVS
ADBN
ADVD
VDD4
XAYO
AYO
YVG
VREF
VSS
VB
CVG
XACO
ACO
CVRF
CIRF
CVSS
YA
Y9
Y8
Y7
Y6
Y5
Y4
Y3
VSS2
VDD2
Y2
Y1
XYOE
CA
C9
C8
C7
C6
C5
C4
C3
C2
XCOE
C1
APCN
RATI
NTPL
TST
VSS3
VDD3
LE
INIT
TMD2
TMD1
TOM3
TOM2
TOM1
Q1301 2SA1037K
Q1302 2SA1037K
Q1303 2SA1037K
Q1304 2SC2412K
Q1305 2SC2412K
Q1306 2SC2412K
Q1307 2SA1037K
Q1308 2SA1037K
Q1309 2SC2412K
Q1311 2SC2412K
Q1312 2SA1037K
Q1313 2SC2412K
Q1314 2SA1037K
Q1315 2SA1037K
D1301 DAN202K
FL1301
FL1302
FL1303
LPF
L1303 4.7µH :EL0606
L1304 4.7µH :EL0606
(A.5V)
9V
IC402 TEA2114
C429 330 16V
R428 10 :FPRD
C401 0.47 16V F:CHIP
C403 0.47 16V F:CHIP
IC401 CXA1545AS
TV IN
AV-3 IN
AV-4 OUT
AV-2 IN
AV-1 IN
AV-4 IN
AV-2 OUT
PIP OUT
BIAS
TRAP
MUTE
GND
SCL
SDA
J901 :S-BLOCK
R907 75 1/8W :CHIP
R908 75 1/8W :CHIP
D901 MTZJ-9.1
D902 MTZJ-9.1
J903 21P :AV-1
D907 MTZJ-9.1
D908 MTZJ-9.1
D909 MTZJ-9.1
D910 MTZJ-9.1
D911 MTZJ-9.1
D924 MTZJ-9.1
D925 MTZJ-9.1
D926 MTZJ-9.1
D927 MTZJ-9.1
D928 MTZJ-9.1
D930 MTZJ-9.1
9V
FR R IN
GND
FR L IN
GND
FR V IN
GND
FR C IN
GND
FR Y IN
TO H1 BOARD CN1008
CN1208 10P WHT-L :S-MICRO
D401 MTZJ-9.1
D403 MTZJ-9.1
D405 MTZJ-9.1
D406 MTZJ-9.1
D407 MTZJ-9.1
JR403 0 :CHIP
JR402 0 :CHIP
JR401 0 :CHIP
GND
R
G
B
BLK
PROTECT
9V
GND
V
GND
Y
GND
C
GND
SCL
GND
SDA
GND
5V
GND
2 FSC
PAL/NT
LC
PIP V
GND
SSCP
TV VIDEO
TO A BOARD CN0109

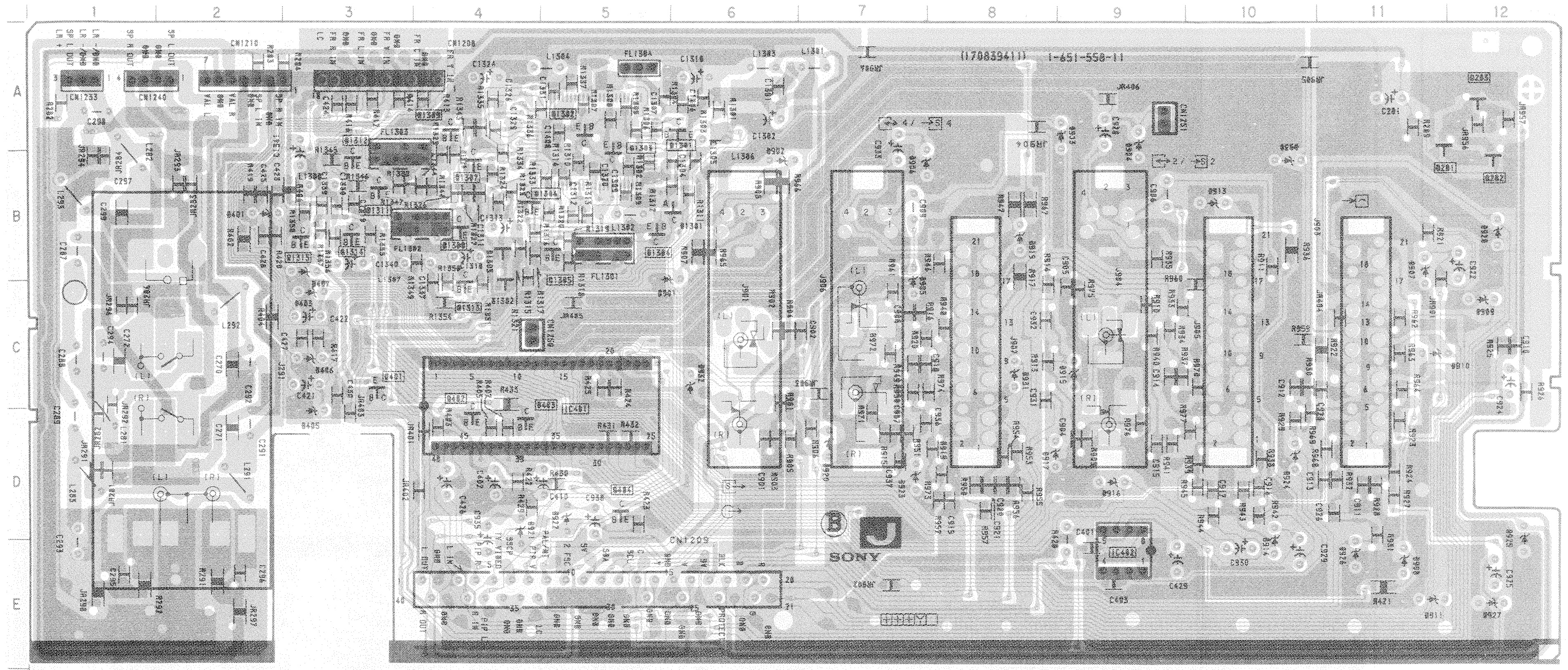


8
9
10
11
12
13
14
15
16
17
18
IC1301
CX02024Q-TL
IC401
CXA1545AS
IC402
TEA2114
J901 :S-BLOCK
J904 :S-BLOCK
J906 :S-BLOCK
J903 21P :AV-1
J905 21P :AV-2
J907 21P :AV-4
(MONO)
Q1308 2SA1037K
Q1309 2SC2412K
Q1311 2SC2412K
Q1312 2SA1037K
Q401 2SC2412K
Q402 2SC2412K
Q403 2SC2412K
Q404 2SC2412K
FL1302
FL1303
LPF
5V
9V
TV IN
AV-4 OUT
AV-1 IN
AV-2 OUT
AV-3 IN
AV-2 IN
AV-4 IN
PIP OUT
BIAS
TRAP
MUTE
SCL
SDA
ADD
CN1209 40P :BTOB
GND
R
G
B
BLK
PROTECT
9V
V
Y
C
SCL
SDA
5V
2 FSC
PAL/NT
LC
PIP V
SSCP
TV VIDEO
PIP L
PIP R
L IN
R OUT
L OUT
TO A BOARD CN0109

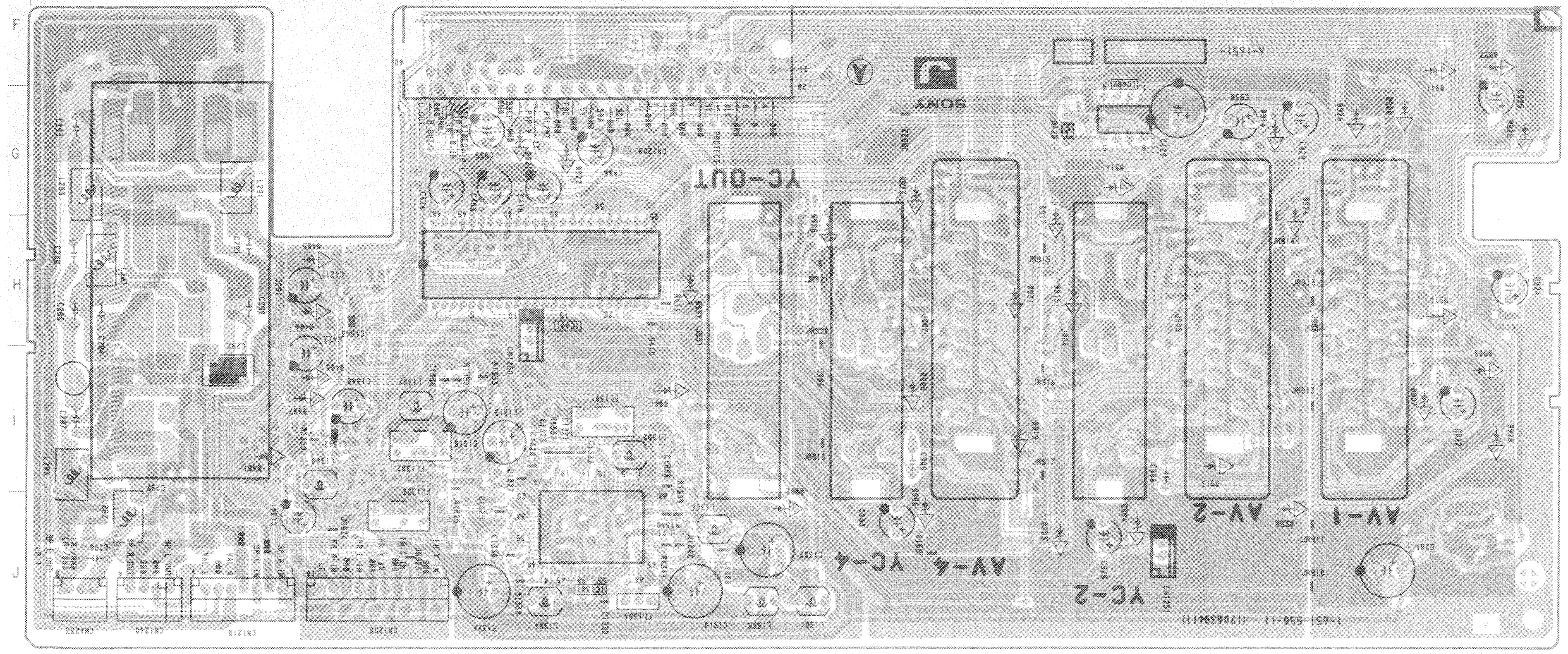
14
15
16
17
18
19
20
21
22
23
SP902
SPEAKER R
L901
SPEAKER L
SP R OUT
GND
GND
SP L OUT
GND
GND
TO A BOARD CN0110
CN1240
3P
RED
:S-MICRO
CN1210
7P
WHT-L
:S-MICRO
VAR L
GND
VAR R
GND
SP L IN
GND
SP R IN
CN1233
3P
WHT
:S-MICRO
SP L OUT
LR- GND
LR- GND
JR296
0
:CHIP
JR294
0
:CHIP
C295
0.001
B:CHIP
R292
470
1/8W
:CHIP
R291
470
1/8W
:CHIP
C296
0.001
B:CHIP
L/D/D/I
R/D/D/D
L291
FXC-3B
C271
0.022
F:3216
JR291
0
:CHIP
C270
0.022
F:3216
L292
FXC-3B
JR292
0
:CHIP
J291
IN/OUT
BOARD
J906
:S-BLOCK
(MONO)
(L)
(R)
R972
1.8k
:CHIP
R916
470k
:CHIP
C908
330p
:CHIP
R920
3.9k
:CHIP
R971
1.8k
:CHIP
R915
470k
:CHIP
C907
330p
:CHIP
R951
3.9k
:CHIP
R910
1.8k
:CHIP
R975
470k
:CHIP
C905
330p
:CHIP
R914
3.9k
:CHIP
R976
1.8k
:CHIP
R909
470k
:CHIP
C904
330p
:CHIP
R913
3.9k
:CHIP
J905
21P
:AV-2
J907
21P
:AV-4
R946
75
:CHIP
R970
1.8k
:CHIP
R938
390
:CHIP
R934
3.9k
:CHIP
C914
330p
:CHIP
R977
1.8k
:CHIP
R937
470k
:CHIP
R940
3.9k
:CHIP
R941
470k
:CHIP
C915
330p
:CHIP
R939
390
:CHIP
C929
47
16V
R942
390
:CHIP
R943
47k
:CHIP
D914
MTZJ-9.1
C916
0.0015
B:CHIP
C930
47
16V
R944
390
:CHIP
R945
47k
:CHIP
C917
0.0015
B:CHIP
D916
MTZJ-9.1
R948
10k
:CHIP
R974
1.8k
:CHIP
R950
3.9k
:CHIP
R949
470k
:CHIP
C918
150p
:CHIP
R953
390
:CHIP
R954
390
:CHIP
R973
1.8k
:CHIP
R917
75
1/8W
:CHIP
R919
3.9k
:CHIP
R952
470k
:CHIP
C919
150p
:CHIP
R955
390
:CHIP
D919
MTZJ-9.1
R967
75
1/8W
:CHIP
D932
MTZJ-9.1
R961
9.1k
0.5%
:RN-CP
C920
0.0015
B:CHIP
R956
47k
:CHIP
C909
0.01
F
D905
MTZJ-9.1
R957
390
:CHIP
C921
0.0015
B:CHIP
R958
47k
:CHIP
C938
47
16V
D922
MTZJ-9.1
C936
1
16V
F:CHIP
C937
1
16V
F:CHIP
C935
47
16V
D921
MTZJ-9.1
D920
MTZJ-9.1
D923
MTZJ-9.1
C933
47
16V
C931
1
16V
F:CHIP
C932
1
16V
F:CHIP
C906
0.01
F
D903
MTZJ-9.1
C928
47
16V
D917
MTZJ-9.1
D915
MTZJ-9.1
D904
MTZJ-9.1
D906
MTZJ-9.1
R960
9.1k
0.5%
RN-CP
R431
4.7k
:CHIP
R432
4.7k
:CHIP
R403
100
:CHIP
JR406
0
:CHIP
R407
100
:CHIP
R405
100
:CHIP
JR405
0
:CHIP
R433
0
1/8W
:CHIP
9V
Q401
2SC2412K
Q402
2SC2412K
Q403
2SC2412K
4.0
4.0
8.9
3.4
3.4
3.5
⑥
⑦
⑧
CN1209
40P
:BTOB
J
DIGITAL COMB
AUDIO/VIDEO IN/OUT
AUDIO/VIDEO SWITCH
B-SS4895<AEP>-J..

J [AUDIO/VIDEO SWITCH, DIGITAL COMB, BUFFER]

— J Board — <Conductor Side>


1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
(170839411) 1-651-558-11
SONY
J

— J Board — <Component Side>

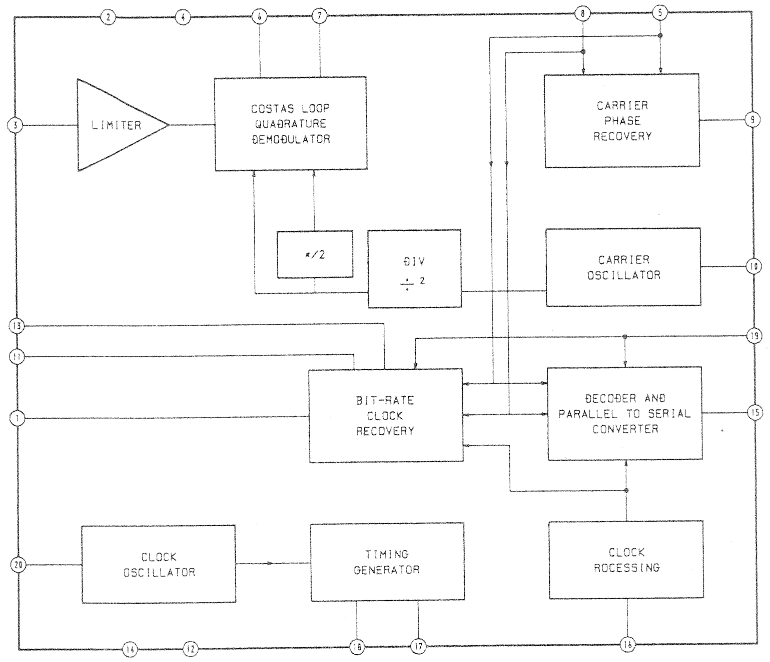

F
G
H
I
J
YC-OUT
AV-4
YC-4
YC-2
AV-2
AV-1
SONY
1-651-558-11 (170839411)

— J Board —

IC	
IC401	D-5
IC402	E-9
IC1301	J-5
TRANSISTOR	
Q401	C-3
Q402	D-3
Q403	D-4
Q404	D-5
Q1301	A-6
Q1302	A-5
Q1303	A-5
Q1304	B-5
Q1305	B-5
Q1306	B-4
Q1307	B-4
Q1308	B-4
Q1309	A-4
Q1311	B-3
Q1312	B-3
Q1313	C-4
Q1314	B-3
Q1315	B-3
DIODE	
D401	B-2
D403	C-3
D405	D-3
D406	C-3
D407	B-3
D901	C-5
D902	C-6
D903	A-9
D904	A-9
D905	C-7
D906	C-7
D907	B-11
D908	E-11
D909	D-12
D910	D-11
D911	E-11
D913	B-10
D914	E-10
D915	C-9
D916	D-9
D917	D-8
D919	B-8
D910	D-7
D921	D-4
D922	D-5
D923	D-7
D924	D-10
D925	E-12
D926	E-11
D927	E-12
D928	B-12
D930	B-10
D931	D-8
D932	D-6
D1301	B-6

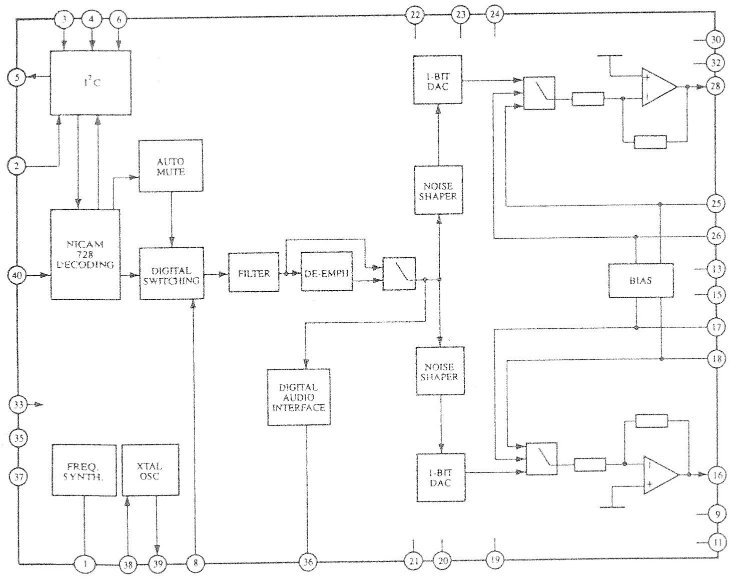
- ▨ : Pattern from the side which enables seeing.
- ▨ : Pattern of the rear side.

A2 BOARD IC1101 TDA8732



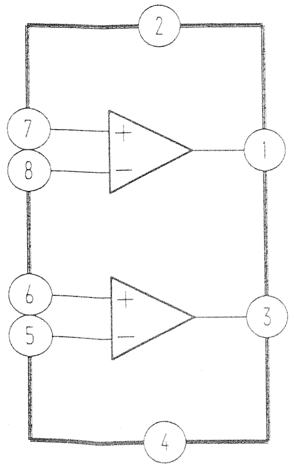
LIMITER
COSTAS LOOP QUADRATURE DEMODULATOR
CARRIER PHASE RECOVERY
÷/2
DIV ÷ 2
CARRIER OSCILLATOR
BIT-RATE CLOCK RECOVERY
DECODER AND PARALLEL TO SERIAL CONVERTER
CLOCK OSCILLATOR
TIMING GENERATOR
CLOCK ROCESSING

A2 BOARD IC1102 SAA7282-ZP



I²C
AUTO MUTE
NICAM 728 DECODING
DIGITAL SWITCHING
FILTER
DE-EMPH
DIGITAL AUDIO INTERFACE
NOISE SHAPER
1-BIT DAC
BIAS
FREQ. SYNTH
XTAL OSC

A2 BOARD IC2202 TDA2822M

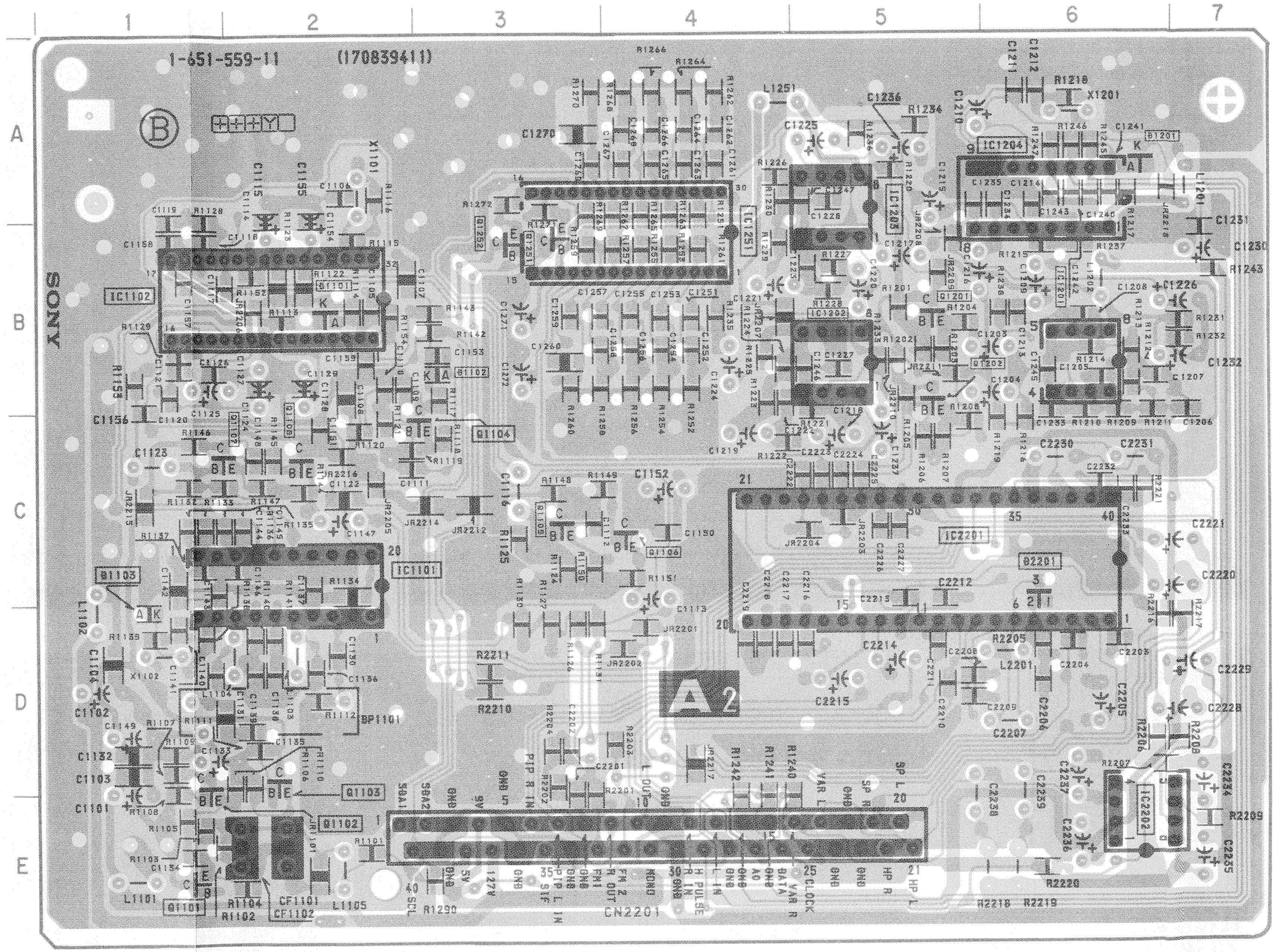


— A2 Board —

IC	
IC1101	C-2
IC1102	B-2
IC1201	B-6
IC1202	B-5
IC1203	A-5
IC1204	A-6
IC1251	B-4
IC2201	C-5
IC2202	E-6
TRANSISTOR	
Q1101	E-1
Q1102	D-1
Q1103	D-2
Q1104	C-3
Q1105	C-3
Q1106	C-4
Q1107	C-1
Q1108	C-2
Q1201	B-5
Q1202	B-5
Q1251	B-3
Q1252	B-3
DIODE	
D1101	B-2
D1102	B-3
D1103	D-1
D1201	A-6
D2201	C-6

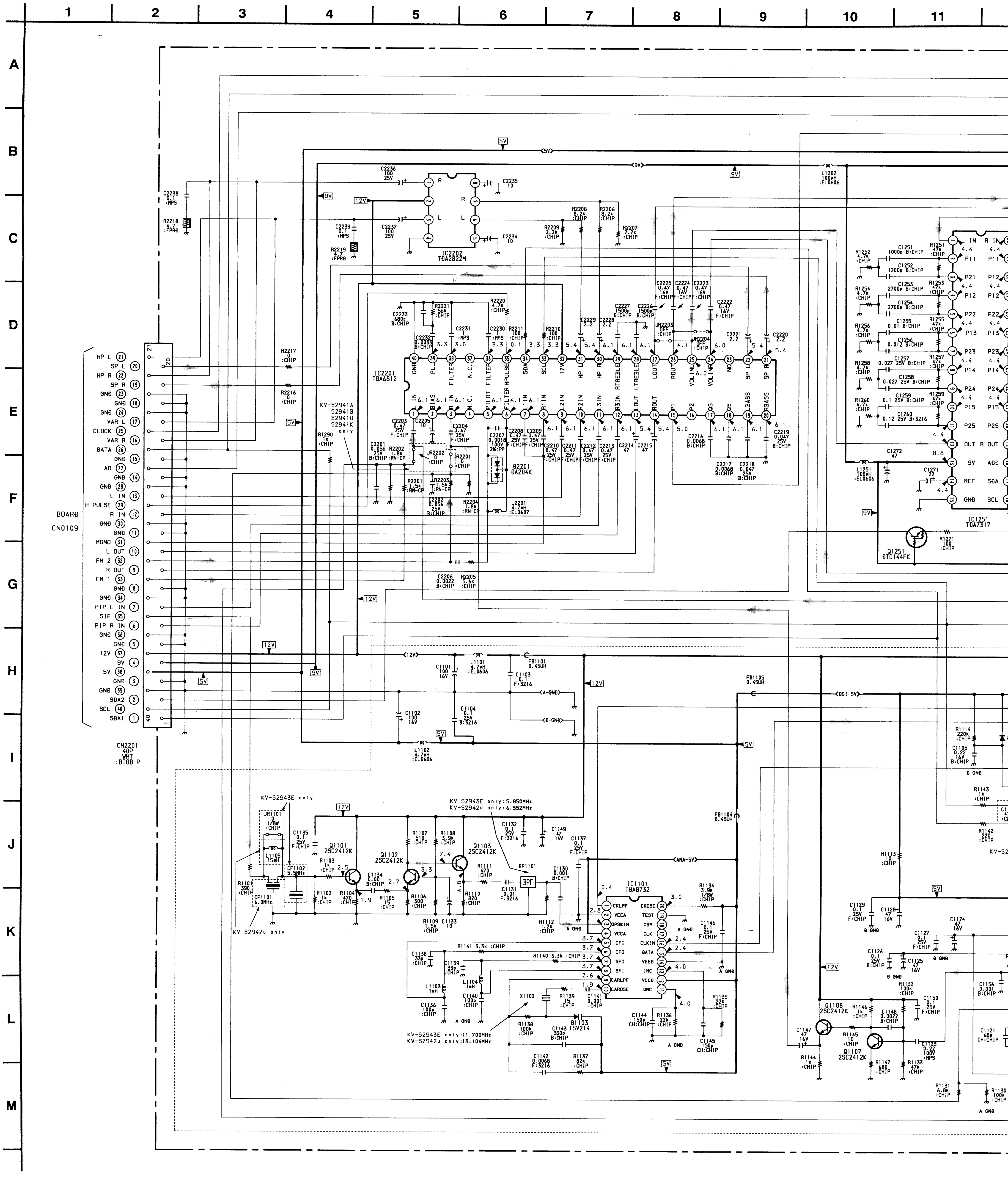
A2 [DEMODULATOR, MICAM-DECODER, SOUND-CONTROLLER, HEADPHONE AMP]

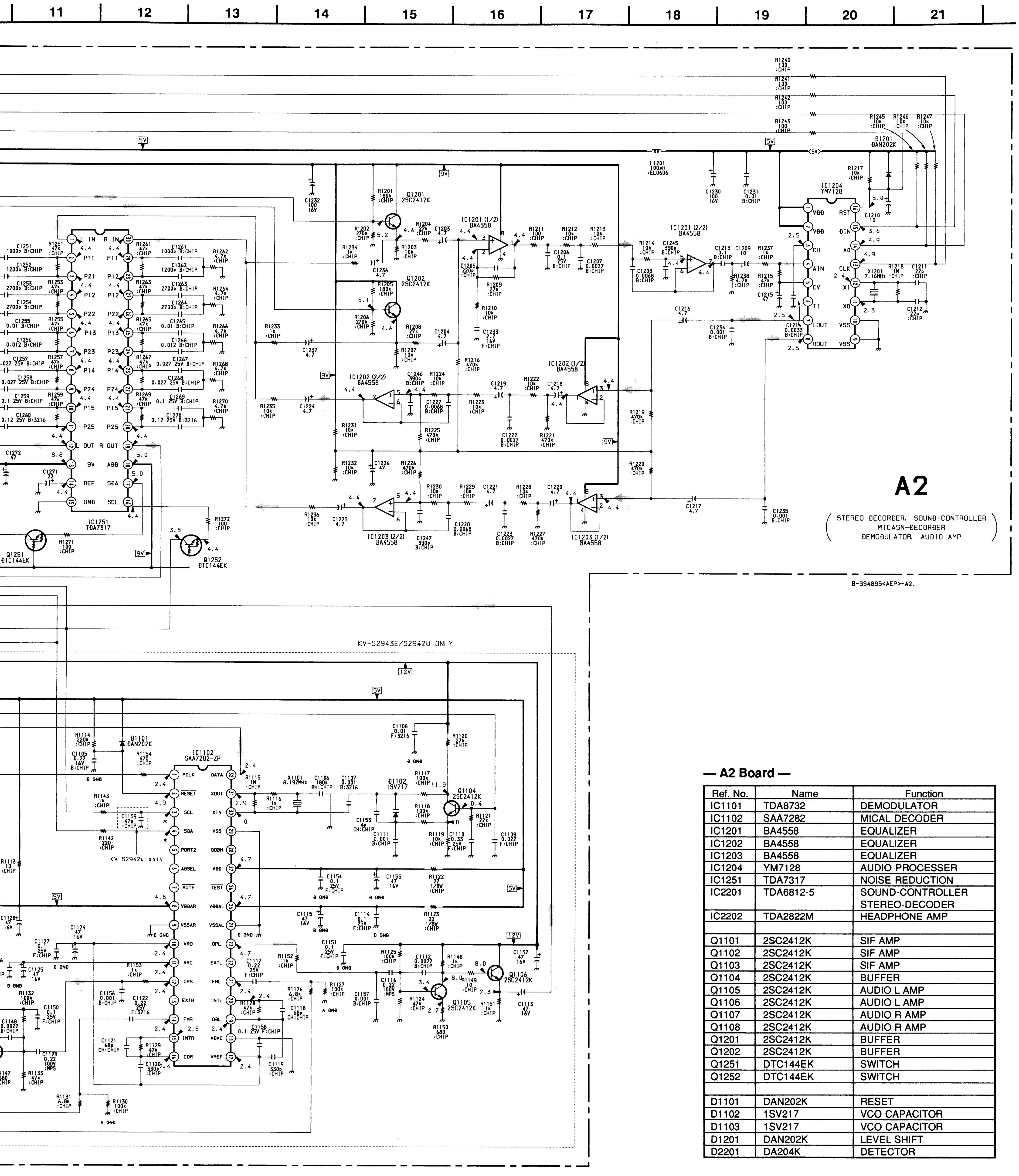
— A2 Board —



1
2
3
4
5
6
7
A
B
C
D
E
1-651-559-11
(170839411)
SONY
A2
IC1101
IC1102
IC1201
IC1202
IC1203
IC1204
IC1251
IC2201
IC2202
CN2201

- ▨ : Pattern from the side which enables seeing.
- ▨ : Pattern of the rear side.


1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
I
J
K
L
M
BOARD
CN0109
CN2201
40P
WHT
:BTOB-P
HP L
SP L
HP R
SP R
GND
VAR L
CLOCK
VAR R
DATA
AD
L IN
H PULSE
R IN
MONO
L OUT
FM 2
R OUT
FM 1
PIP L IN
SIF
PIP R IN
12V
9V
5V
SDA2
SCL
SDA1
IC2202
TDA2822M
IC2201
TDA6812
KV-S2941A
S2941B
S2941D
S2941K
only
D2201
DA204K
L2201
4.7mH
:EL0607
L1202
100mH
:EL0606
L1251
100mH
:EL0606
IC1251
TDA7317
Q1251
DTC144EK
FB1101
0.45UH
FB1105
0.45UH
FB1104
0.45UH
L1101
4.7mH
:EL0606
L1102
4.7mH
:EL0606
KV-S2943E only
KV-S2942u only
JR1101
L1105
15mH
CF1101
6.0MHz
CF1102
5.5MHz
Q1101
2SC2412K
Q1102
2SC2412K
Q1103
2SC2412K
KV-S2943E only:5.850MHz
KV-S2942u only:6.552MHz
BPF1101
BPF
IC1101
TDA8732
X1102
D1103
1SV214
KV-S2943E only:11.700MHz
KV-S2942u only:13.104MHz
Q1108
2SC2412K
Q1107
2SC2412K
A GND
B GND
A-GND
B-GND
ANA-5V
DGI-5V



11
12
13
14
15
16
17
18
19
20
21
A2
STEREO DECORDER, SOUND-CONTROLLER
MICASN-DECORDER
DEMODULATOR, AUDIO AMP
B-SS4895<AEP>-A2.
KV-S2943E/S2942U ONLY
KV-S2942u only
IC1251
TDA7317
IC1201 (1/2)
BA4558
IC1201 (2/2)
BA4558
IC1202 (1/2)
BA4558
IC1202 (2/2)
BA4558
IC1203 (1/2)
BA4558
IC1203 (2/2)
BA4558
IC1204
YM7128
IC1102
SAA7282-ZP
Q1201
2SC2412K
Q1202
2SC2412K
Q1251
DTC144EK
Q1252
DTC144EK
Q1104
2SC2412K
Q1105
2SC2412K
Q1106
2SC2412K
D1101
DAN202K
D1102
1SV217
D1201
DAN202K
X1101
8.192MHz
X1201
7.16MHz
L1201
100μH
:EL0606
5V
9V
12V

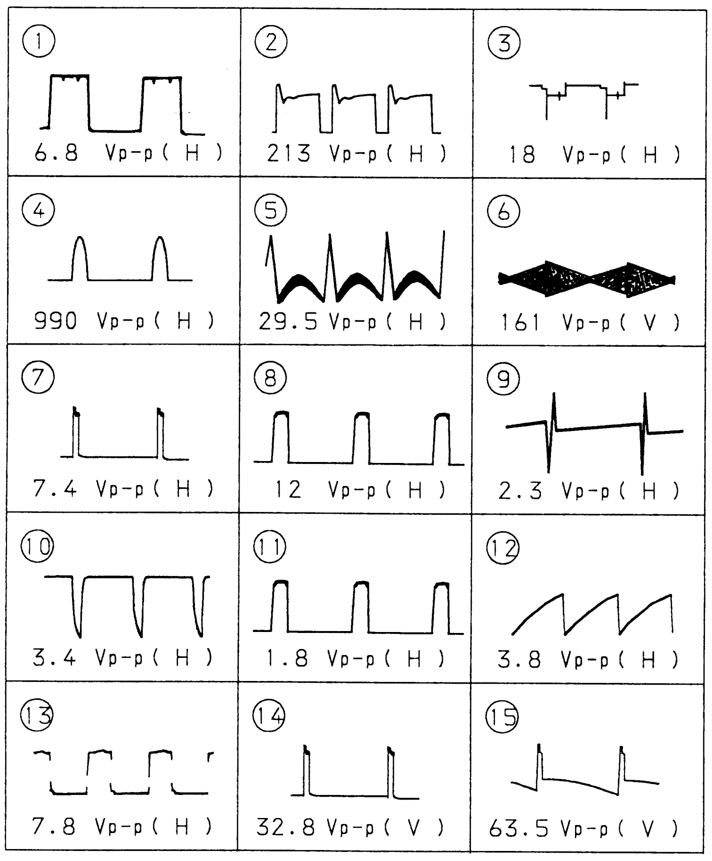
— A2 Board —

Ref. No.	Name	Function
IC1101	TDA8732	DEMODULATOR
IC1102	SAA7282	MICAL DECODER
IC1201	BA4558	EQUALIZER
IC1202	BA4558	EQUALIZER
IC1203	BA4558	EQUALIZER
IC1204	YM7128	AUDIO PROCESSER
IC1251	TDA7317	NOISE REDUCTION
IC2201	TDA6812-5	SOUND-CONTROLLER STEREO-DECODER
IC2202	TDA2822M	HEADPHONE AMP
Q1101	2SC2412K	SIF AMP
Q1102	2SC2412K	SIF AMP
Q1103	2SC2412K	SIF AMP
Q1104	2SC2412K	BUFFER
Q1105	2SC2412K	AUDIO L AMP
Q1106	2SC2412K	AUDIO L AMP
Q1107	2SC2412K	AUDIO R AMP
Q1108	2SC2412K	AUDIO R AMP
Q1201	2SC2412K	BUFFER
Q1202	2SC2412K	BUFFER
Q1251	DTC144EK	SWITCH
Q1252	DTC144EK	SWITCH
D1101	DAN202K	RESET
D1102	1SV217	VCO CAPACITOR
D1103	1SV217	VCO CAPACITOR
D1201	DAN202K	LEVEL SHIFT
D2201	DA204K	DETECTOR

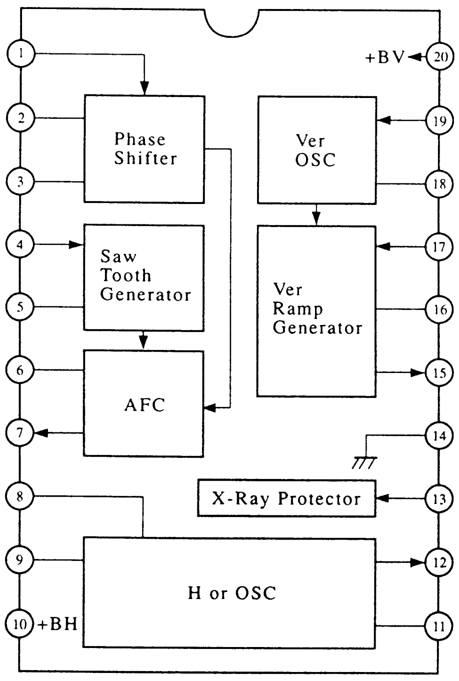
Schematic diagram
← A2 board

Schematic diagram
D board →

— D Board —

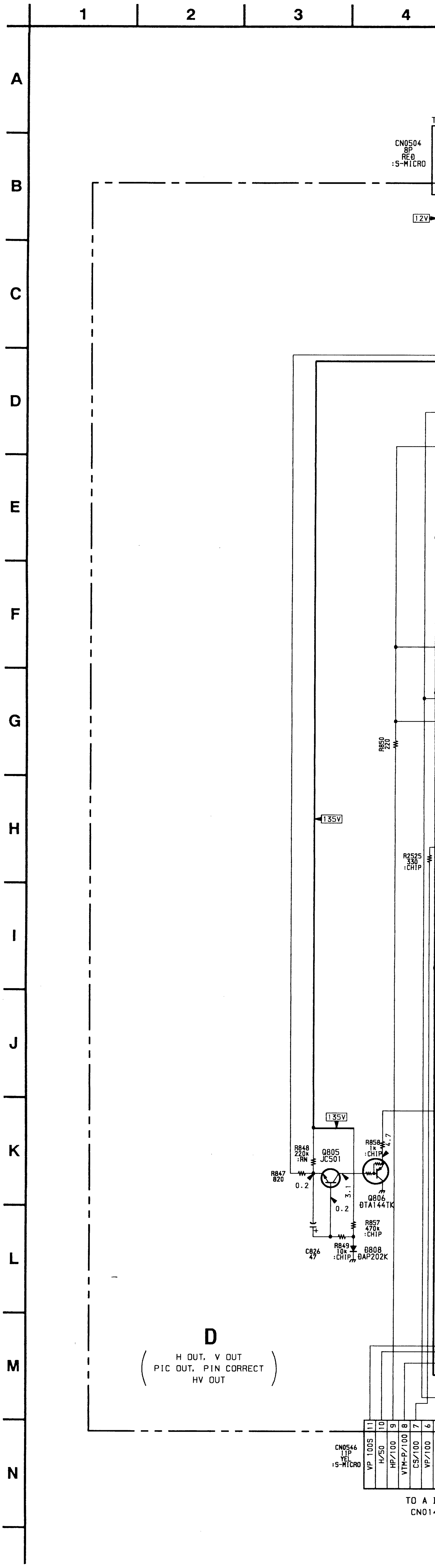


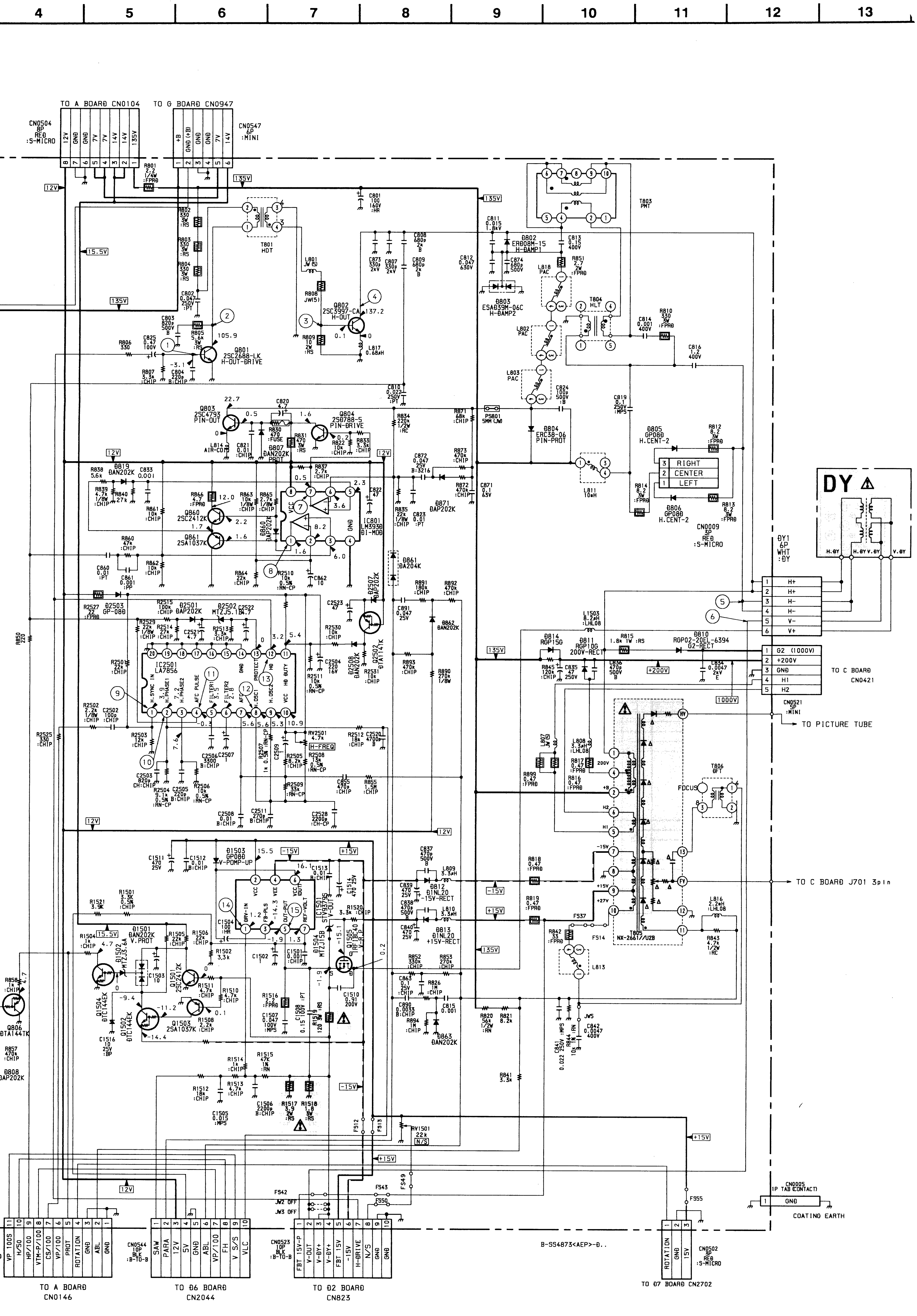
D BOARD IC2501 LA7856


①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩ +BH
+BV ⑳
⑲
⑱
⑰
⑯
⑮
⑭
⑬
⑫
⑪
Phase Shifter
Ver OSC
Saw Tooth Generator
Ver Ramp Generator
AFC
X-Ray Protector
H or OSC

— D Board —

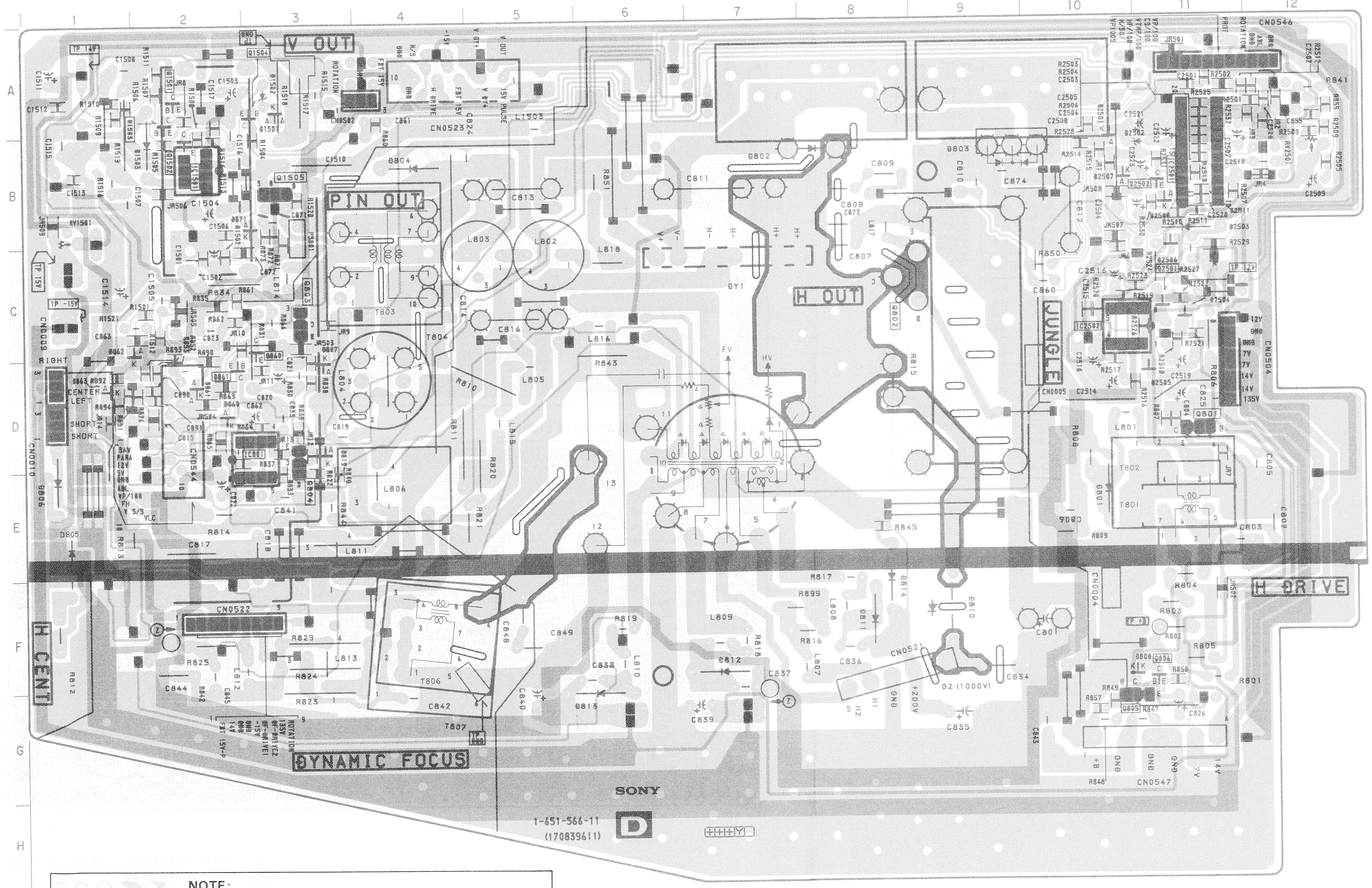
Ref. No.	Name	Function
IC801	LM393D	DI • MOD
IC1501	STV9379S	V OUT
IC2501	LA7856	JUNGLE
Q801	2SC2688-LK	H DRIVE
Q802	2SC3997-CA	H OUT
Q803	2SC4793	PIN OUT
Q804	2SD788-5	PIN DRIVE
Q805	JC501	SWITCH DRIVE
Q806	DTA144TK	V PROTECT SWITCH
Q860	2SC2412K	PIN AMP
Q861	2SA1037K	PIN AMP
Q1501	2SC2412K	V PROTECT
Q1502	DTC144EK	V PROTECT
Q1503	2SA1037K	V PROTECT
Q1504	DTC144EK	V PROTECT
Q1515	IRF1BC40	V R.P
Q2502	DTA114TK	SWITCH
D802	ERD08M-15	H DAMPER 1
D803	ESAD39M-06C	H DAMPER 2
D804	ERC38-06	PIN PROTECT
D805	GP08D	H CENT 1
D806	GP08D	H CENT 2
D807	DAN202K	PROTECT
D808	DAP202K	PROTECT
D810	RGP02-20EL-6394	G2 RECT
D811	RGP10G	200V RECT
D812	RGP10G	–15V RECT
D813	RGP10G	+15V RECT
D814	RGP15G	200V RECT
D819	DAN202K	SWITCH
D860	DAP202K	PROTECT
D861	DA204K	LEVEL SHIFT
D862	DAN202K	LEVEL SHIFT
D863	DAN202K	LEVEL SHIFT
D871	DAP202K	SWITCH
D1501	DAN202K	V PROTECT
D1502	MTZJ3,6A	V PROTECT
D1503	GP08D	V POMP-UP
D2501	DAP202K	HP RECT
D2502	NTZJ5,1B	LEVEL SHIFT
D2503	GP-08D	VCO SUPPLY
D2507	DAP202K	PROTECT
D2508	DAN202K	SWITCH


1
2
3
4
A
B
C
D
E
F
G
H
I
J
K
L
M
N
CN0504
8P
RED
:S-MICRO
12V
135V
R850
220
R2525
330
:CHIP
135V
R848
220k
:RN
Q805
JC501
R847
820
0.2
3.1
0.2
R858
1k
:CHIP
4.7
Q806
DTA144TK
R857
470k
:CHIP
C826
47
R849
10k
:CHIP
D808
DAP202K
D
H OUT, V OUT
PIC OUT, PIN CORRECT
HV OUT
CN0546
11P
YEL
:S-MICRO
11
10
9
8
7
6
VP 100S
H/50
HP/100
VTM-P/100
CS/100
VP/100
TO A
CN01


4
5
6
7
8
9
10
11
12
13
TO A BOARD CN0104
TO G BOARD CN0947
CN0504 8P RED :S-MICRO
CN0547 6P :MINI
T801 HDT
Q801 2SC2688-LK H-OUT-DRIVE
Q802 2SC3997-CA H-OUT
D802 ER008M-15 H-DAMP1
D803 ESA039M-06C H-DAMP2
T803 PMT
T804 HLT
Q803 2SC4793 PIN-OUT
Q804 2SD788-5 PIN-DRIVE
D804 ERC38-06 PIN-PROT
D805 GP08D H.CENT-2
D806 GP08D H.CENT-2
RIGHT
CENTER
LEFT
CN0009 3P RED :S-MICRO
DY
DY1 6P WHT :DY
H+
H+
H-
H-
V-
V+
IC801 LM393D DI-MOD
Q860 2SC2412K
Q861 2SA1037K
IC2501 LA7856
H.SYNC IN
H.PHASE1
H.PHASE2
AFC PULSE
FILTER1
FILTER2
AFC
H.OSC1
H.OSC2
VCC
HD DUTY
PROTECT
RV2501 H-FREQ
D810 RGP02-20EL-6394 G2-RECT
D811 RGP10G 200V-RECT
D814 RGP15G
G2 (1000V)
+200V
GND
H1
H2
TO C BOARD CN0421
CN0521 5P :MINI
TO PICTURE TUBE
T806 BFT
FOCUS
T805 NX-2661//J2B
TO C BOARD J701 3pin
IC1501 STV9379E
D1503 GP08D V-POMP-UP
D1501 DAN202K V.PROT
D1502 MTZJ3.6A
Q1501 2SC2412K
Q1503 2SA1037K
Q1504 DTC144EK
Q1502 DTC144EK
Q806 DTA144TK
D808 DAP202K
D812 D1NL20 -15V-RECT
D813 D1NL20 +15V-RECT
D863 DAN202K
RV1501 22k N/S
CN0005 1P TAB (CONTACT)
COATING EARTH
TO A BOARD CN0146
CN0544 10P BLK :B-TO-B
TO D6 BOARD CN2044
CN0523 10P BLK :B-TO-B
TO D2 BOARD CN823
CN0502 3P RED :S-MICRO
TO D7 BOARD CN2702
12V
15.5V
135V
+15V
-15V
+200V
1000V
VP 100S
H/50
HP/100
VTH-P/100
CS/100
VP/100
PROT
ROTATION
GND
ABL
SAW
PARA
5V
FH
V S/S
VLC
FBT 15V-P
V-OUT
V-DY+
FBT 15V
H-DRIVE
N/S
B-SS4873<AEP>-B..

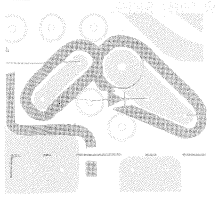
D [V-OUT, H-OUT, JUNGLE, DI MOD]

— D Board —


V OUT
PIN OUT
H OUT
JUNGLE
H DRIVE
H CENT
DYNAMIC FOCUS
RIGHT
CENTER
LEFT
SHORT
SHORT
CN0523
CN0522
CN0521
CN0504
CN0546
CN0547
CN0009
CN0010
T803
T804
T806
T807
T802
T801
L802
L803
L804
L805
L806
L816
L818
DY1
FV
HV
G2 (1000V)
+200V
SONY
1-651-566-11
(170839611)
D
1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H

— D Board —

IC	
IC801	D-3
IC1501	B-2
IC2501	B-11
TRANSISTOR	
Q801	D-11
Q802	C-8
Q803	C-3
Q804	E-3
Q805	G-10
Q806	F-11
Q860	C-3
Q861	D-2
Q1501	A-2
Q1502	B-2
Q1503	A-2
Q1504	A-3
Q1505	B-3
Q2502	B-11
DIODE	
D802	B-8
D803	B-9
D804	B-4
D805	E-1
D806	E-1
D807	D-3
D808	F-10
D810	F-9
D811	F-8
D812	F-7
D813	G-6
D814	F-8
D819	D-3
D860	D-2
D861	D-2
D862	C-1
D863	D-1
D871	B-2
D1501	A-3
D1502	A-3
D1503	B-2
D2501	A-10
D2502	B-11
D2503	B-11
D2507	B-10
D2508	B-11
VARIABLE RESISTOR	
RV2501	B-12
RV1501	B-2



NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

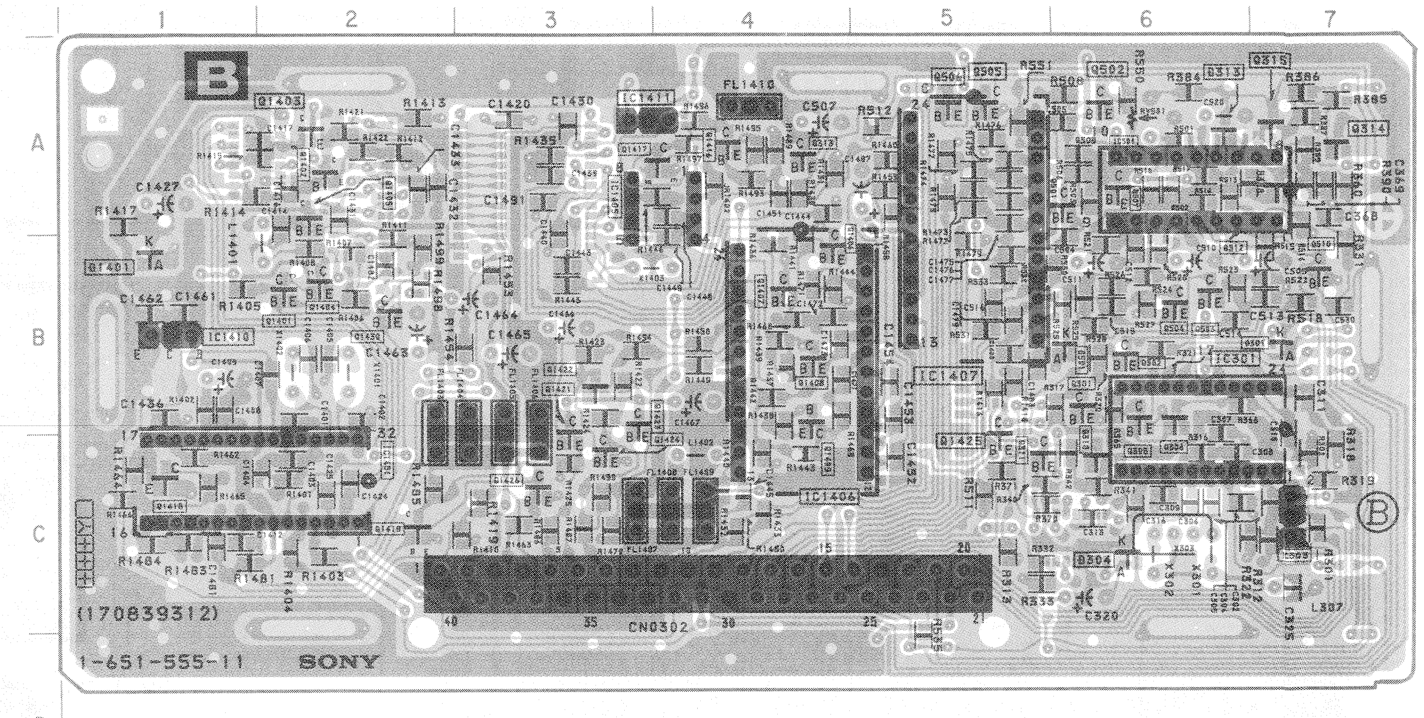
- ▨ : Pattern from the side which enables seeing.
- ▨ : Pattern of the rear side.

— B Board —

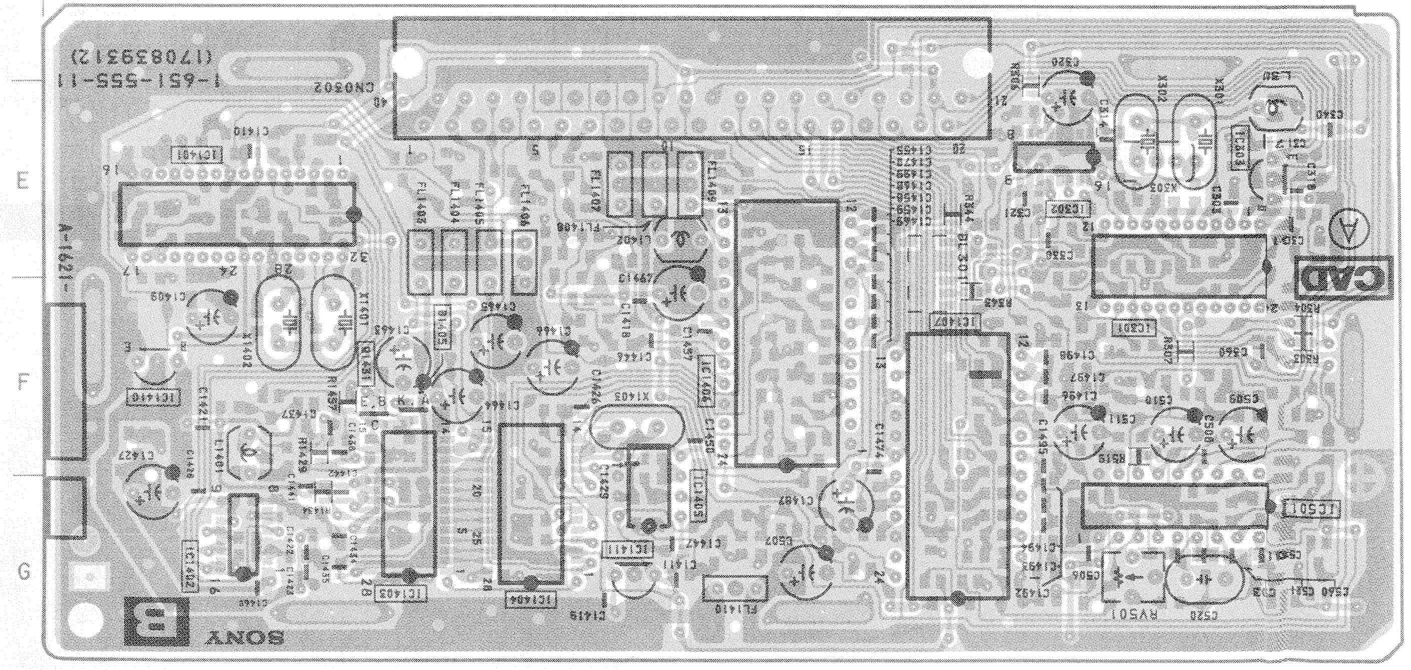
IC	
IC301	B-6
IC302	E-6
IC303	C-7
IC501	A-6
IC1401	C-2
IC1402	G-2
IC1403	G-2
IC1404	G-3
IC1405	A-3
IC1406	B-4
IC1407	B-5
IC1410	B-1
IC1411	A-3
TRANSISTOR	
Q301	B-6
Q302	B-6
Q305	B-6
Q310	C-6
Q311	C-5
Q313	A-4
Q501	A-6
Q502	A-6
Q503	B-6
Q504	B-6
Q505	A-5
Q506	A-5
Q507	A-6
Q510	A-7
Q1401	B-2
Q1402	A-1
Q1403	A-1
Q1404	B-2
Q1405	A-1
Q1406	B-4
Q1407	B-4
Q1408	B-4
Q1409	C-4
Q1416	A-4
Q1417	A-4
Q1419	C-2
Q1421	B-3
Q1422	B-3
Q1423	B-3
Q1424	C-3
Q1425	C-3
Q1426	C-3
Q1430	B-2
Q1431	F-2
DIODE	
D301	B-7
D304	C-6
D501	B-6
D1401	B-1
D1405	F-2
VARIABLE RESISTOR	
RV501	A-6

B [CHROMA DECODER, RGB SW, H.V SYNC SEP]

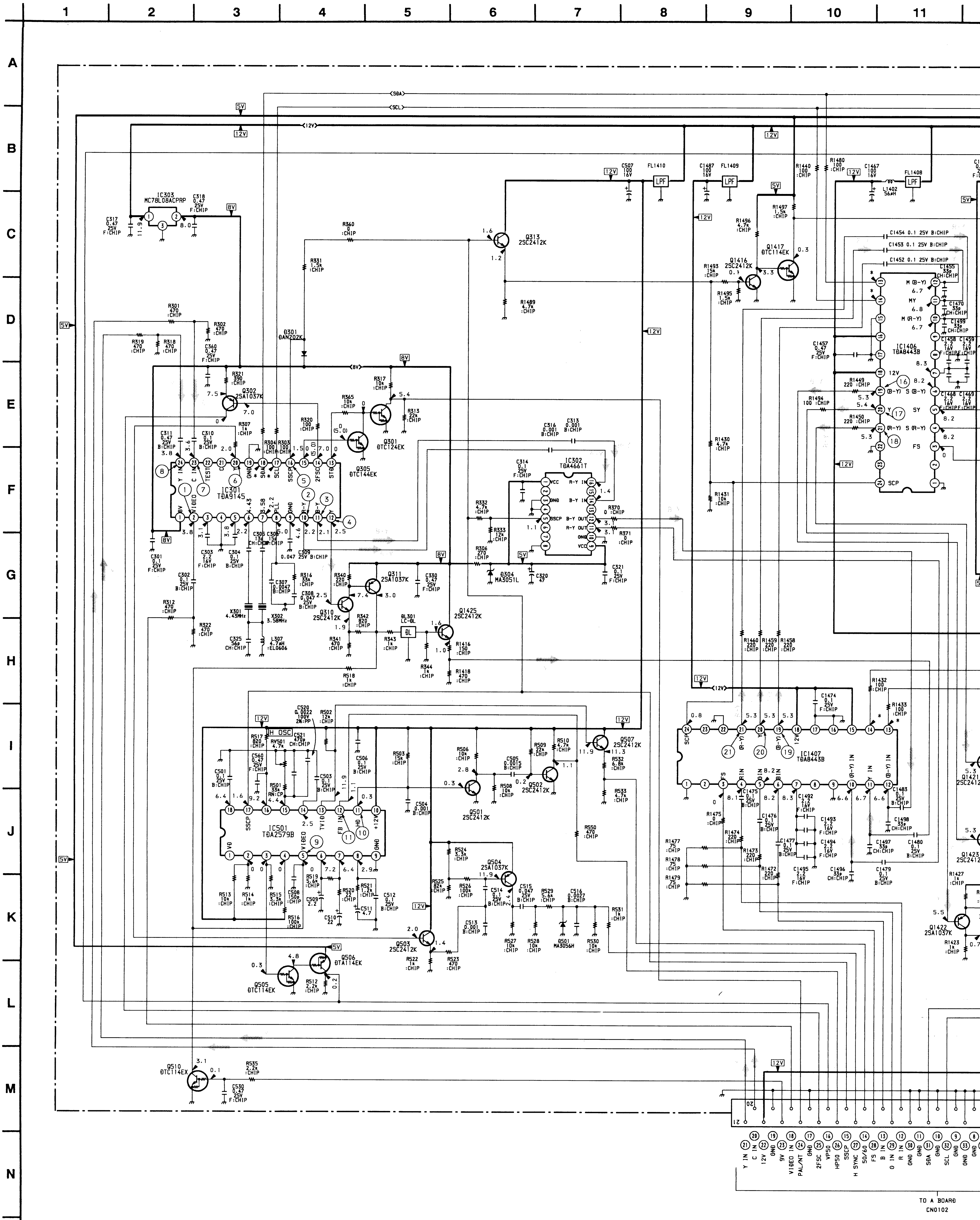
— B Board — <Conductor Side>

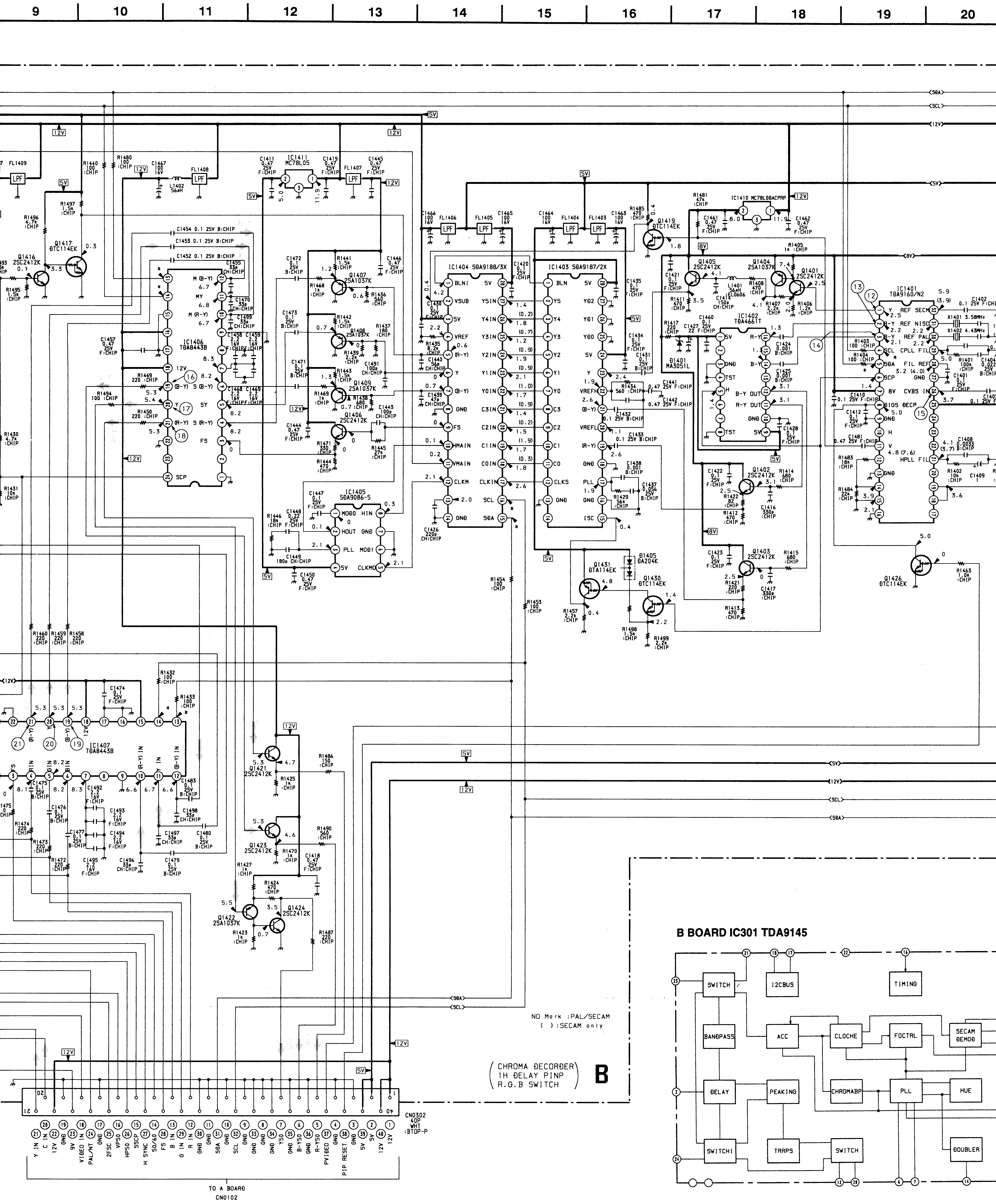

1
2
3
4
5
6
7
A
B
C
(170839312)
1-651-555-11
SONY
CN0302

— B Board — <Component Side>

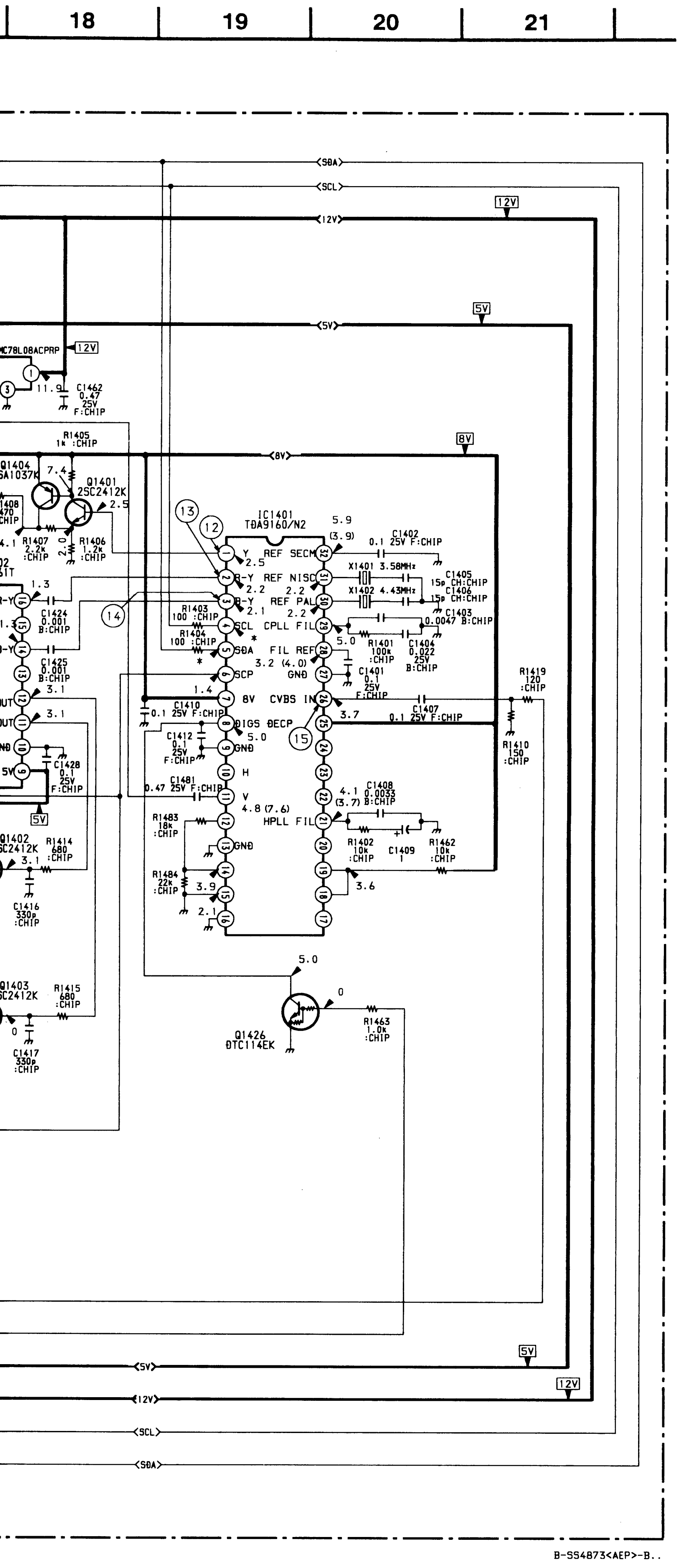

D
E
F
G
CN0302
A-1621-
RV501
SONY
CAD

- ▨ : Pattern from the side which enables seeing.
- ▨ : Pattern of the rear side.

1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
I
J
K
L
M
N
SDA
SCL
5V
12V
8V
IC303
MC78L08ACPRP
C317 0.47 25V F:CHIP
C318 0.47 25V F:CHIP
R360 0 :CHIP
R331 1.5k :CHIP
Q313 2SC2412K
R1489 4.7k :CHIP
C507 100 16V
FL1410
LPF
C1487 100 16V
FL1409
R1440 100 :CHIP
R1480 100 :CHIP
C1467 100 16V
FL1408
L1402 56μH
R1497 1.5k :CHIP
R1496 4.7k :CHIP
Q1417 DTC114EK
Q1416 2SC2412K
R1493 15k :CHIP
R1495 1.5k :CHIP
C1454 0.1 25V B:CHIP
C1453 0.1 25V B:CHIP
C1452 0.1 25V B:CHIP
C1455 33p CH:CHIP
C1470 33p
C1499 33p CH:CHIP
C1458 2.2 16V F:CHIP
C1459
IC1406
TDA8443B
C1457 0.47 25V F:CHIP
R1449 220 :CHIP
R1494 100 :CHIP
R1450 220 :CHIP
C1468 2.2 16V F:CHIP
C1469
M (B-Y)
MY
M (R-Y)
(B-Y)
S (B-Y)
Y
SY
(R-Y)
S (R-Y)
FS
SCP
R1430 4.7k :CHIP
R1431 10k :CHIP
R301 470 :CHIP
R302 470 :CHIP
R319 470 :CHIP
R318 470 :CHIP
C360 0.47 25V F:CHIP
D301 DAN202K
R321 390 :CHIP
Q302 2SA1037K
R307 1k :CHIP
R317 10k :CHIP
R365 10k :CHIP
R313 22k :CHIP
Q301 DTC124EK
R320 100 :CHIP
R304 100 :CHIP
R303 100 :CHIP
C311 0.47 25V B:CHIP
C310 0.1 25V B:CHIP
IC301
TDA9145
Y IN
C IN
TEST
VIDEO
GND
SDA
SCL
SSC
2FSC
STB
PLL
R-Y
B-Y
Q305 DTC144EK
C316 0.001 B:CHIP
C313 0.001 B:CHIP
IC302
TDA4661T
VCC
R-Y IN
B-Y IN
SSCP
B-Y OUT
R-Y OUT
C314 0.1 25V F:CHIP
R332 4.7k :CHIP
R333 12k :CHIP
R306 270 :CHIP
D304 MA3051L
C320 47
C321 0.1 25V F:CHIP
R370 0 :CHIP
R371 0 :CHIP
C301 0.1 25V F:CHIP
C302 0.1 25V B:CHIP
C303 2.2 16V F:CHIP
C304 0.1 25V B:CHIP
C305 13p CH:CHIP
C306 15p CH:CHIP
C309 25V B:CHIP
C307 0.0047 B:CHIP
R316 33k :CHIP
C308 0.047 25V B:CHIP
X301 4.43MHz
X302 3.58MHz
C325 56p CH:CHIP
L307 4.7μH EL0606
R312 470 :CHIP
R322 470 :CHIP
R340 220 :CHIP
Q311 2SA1037K
C330 0.47 25V F:CHIP
Q310 2SC2412K
R342 820 :CHIP
R341 470 :CHIP
R343 1k :CHIP
DL301 LC-DL
DL
R344 1k :CHIP
Q1425 2SC2412K
R1416 150 :CHIP
R1418 470 :CHIP
R518 1k :CHIP
C520 0.0022 100V 2N:PP
R502 12k :CHIP
H OSC
R517 820 :CHIP
RV501 4.7k
C521 470p CH:CHIP
C560 0.47 25V F:CHIP
C501 0.1 25V B:CHIP
R501 33k RN:CP
C503 0.1 25V B:CHIP
C506 0.1 25V B:CHIP
R503 15k :CHIP
C504 0.001 B:CHIP
IC501
TDA2579B
SSCP
TV1D
FB IN
HD
+12V
VD
VIDEO
GND
R513 10k :CHIP
R514 1k :CHIP
R515 3.3k :CHIP
C508 150p :CHIP
R519 5.6k :CHIP
C509 2.2
R520 22 :CHIP
R521 1.2k :CHIP
C511 4.7
C510 22
C512 0.1 25V B:CHIP
R516 100k :CHIP
R506 10k :CHIP
C505 0.0015 B:CHIP
R509 22k :CHIP
R510 4.7k :CHIP
R508 10k :CHIP
Q502 2SC2412K
Q501 2SC2412K
Q507 2SC2412K
R532 6.8k :CHIP
R533 4.7k :CHIP
R550 470 :CHIP
R524 3.3k :CHIP
Q504 2SA1037K
R525 82k :CHIP
R526 100k :CHIP
C514 0.1 25V B:CHIP
C515 0.047 25V B:CHIP
R529 5.6k :CHIP
C516 0.0027 B:CHIP
C513 0.001 B:CHIP
R527 10k :CHIP
R528 10k :CHIP
D501 MA3056H
R530 10k :CHIP
R531 1k :CHIP
Q503 2SC2412K
R522 1k :CHIP
R523 470 :CHIP
Q505 DTC114EK
Q506 DTA114EK
R512 2.2k :CHIP
Q510 DTC114EX
R535 2.2k :CHIP
C530 0.47 25V F:CHIP
R1460 220 :CHIP
R1459 220 :CHIP
R1458 220 :CHIP
R1432 100 :CHIP
R1433 100 :CHIP
C1474 0.1 25V F:CHIP
IC1407
TDA8443B
FS
R IN
G IN
B IN
(R-Y) IN
Y IN
(B-Y) IN
C1475 0.1 25V B:CHIP
C1476 0.1 25V B:CHIP
C1477 0.1 25V B:CHIP
C1492 2.2 16V F:CHIP
C1493 2.2 16V F:CHIP
C1494 2.2 16V F:CHIP
C1495 2.2 16V F:CHIP
C1496 33p CH:CHIP
C1497 33p CH:CHIP
C1498 33p CH:CHIP
C1480 0.1 25V B:CHIP
C1479 0.1 25V B:CHIP
C1483 0.1 25V B:CHIP
R1475 0 :CHIP
R1474 220 :CHIP
R1473 220 :CHIP
R1472 220 :CHIP
R1477 75 :CHIP
R1478 75 :CHIP
R1479 75 :CHIP
Q1421 2SC2412K
Q1423 2SC2412K
R1427 1k :CHIP
Q1422 2SA1037K
R1423 1k :CHIP
Y IN
C IN
12V
GND
9V
VIDEO IN
PAL/NT
GND
2FSC
VPSD
HPSD
SSCP
H SYNC
50/60
FS
B IN
G IN
R IN
GND
SDA
GND
SCL
GND
TO A BOARD
CN0102


9
10
11
12
13
14
15
16
17
18
19
20
IC1411 MC78L05
IC1404 SDA9188/3X
IC1403 SDA9187/2X
IC1406 TDA8443B
IC1405 SDA9086-5
IC1410 MC78L08ACPRP
IC1402 TDA4661T
IC1401 TDA9160/N2
IC1407 TDA8443B
FL1409
FL1408
FL1407
FL1406
FL1405
FL1404
FL1403
LPF
Q1417 DTC114EK
Q1416 2SC2412K
Q1407 2SA1037K
Q1408 2SA1037K
Q1409 2SA1037K
Q1406 2SC2412K
Q1419 DTC114EK
Q1405 2SC2412K
Q1404 2SA1037K
Q1401 2SC2412K
Q1402 2SC2412K
Q1403 2SC2412K
Q1431 DTA114EK
Q1430 DTC114EK
Q1426 DTC114EK
Q1421 2SC2412K
Q1423 2SC2412K
Q1422 2SA1037K
Q1424 2SC2412K
D1401 MA3051L
D1405 DA204K
X1401 3.58MHz
X1402 4.43MHz
5V
8V
12V
SDA
SCL
CN0302 40P WHT :BTOP-P
Y IN
C IN
12V
GND
9V
VIDEO IN
PAL/NT
2FSC
VP50
HP50
SSCP
50/60
H SYNC
FS
B IN
G IN
R IN
GND
SDA
SCL
Y50
B-Y50
R-Y50
PVIDEO
PIP RESET
5V
TO A BOARD CN0102
NO Mark :PAL/SECAM
( ) :SECAM only
CHROMA DECORDER
1H DELAY PINP
R.G.B SWITCH
B
SWITCH
I2CBUS
TIMING
BANDPASS
ACC
CLOCHE
FOCTRL
SECAM DEMOD
DELAY
PEAKING
CHROMABP
PLL
HUE
SWITCHI
TRAPS
DOUBLER

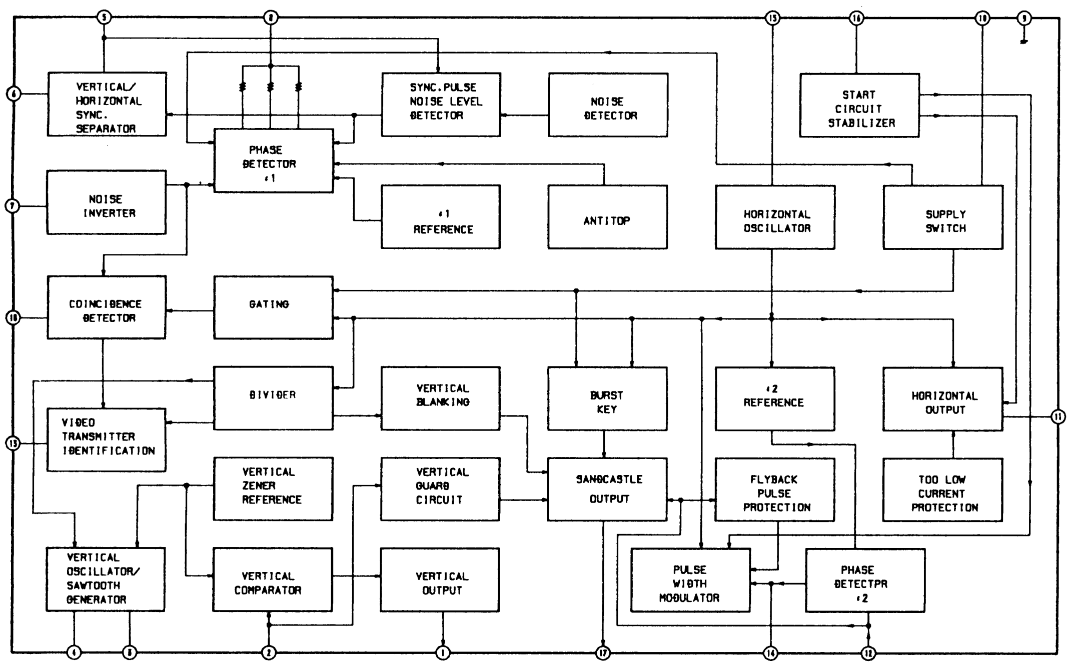
B BOARD IC301 TDA9145



18
19
20
21
<SDA>
<SCL>
<12V>
<5V>
<8V>
12V
5V
8V
MC78L08ACPRP
C1462 0.47 25V F:CHIP
R1405 1k :CHIP
Q1404 2SA1037K
Q1401 2SC2412K
IC1401 TDA9160/N2
Y REF SECM
R-Y REF NTSC
B-Y REF PAL
SCL CPLL FIL
SDA FIL REF
SCP GND
8V CVBS IN
DIGS DECP
GND
H
V
HPLL FIL
GND
X1401 3.58MHz
X1402 4.43MHz
C1402 0.1 25V F:CHIP
C1405 15p CH:CHIP
C1406 15p CH:CHIP
C1403 0.0047 B:CHIP
R1401 100k :CHIP
C1404 0.022 25V B:CHIP
C1401 0.1 25V F:CHIP
C1407 0.1 25V F:CHIP
C1408 0.0033 B:CHIP
R1402 10k :CHIP
C1409 1
R1462 10k :CHIP
R1419 120 :CHIP
R1410 150 :CHIP
C1424 0.001 B:CHIP
C1425 0.001 B:CHIP
C1428 0.1 25V F:CHIP
C1410 0.1 25V F:CHIP
C1412 0.1 25V F:CHIP
C1481 0.47 25V F:CHIP
R1483 18k :CHIP
R1484 22k :CHIP
R1403 100 :CHIP
R1404 100 :CHIP
R1406 1.2k :CHIP
R1407 2.2k :CHIP
Q1402 2SC2412K
R1414 680 :CHIP
C1416 330p :CHIP
Q1403 2SC2412K
R1415 680 :CHIP
C1417 330p :CHIP
Q1426 DTC114EK
R1463 1.0k :CHIP
⑫ ⑬ ⑭ ⑮

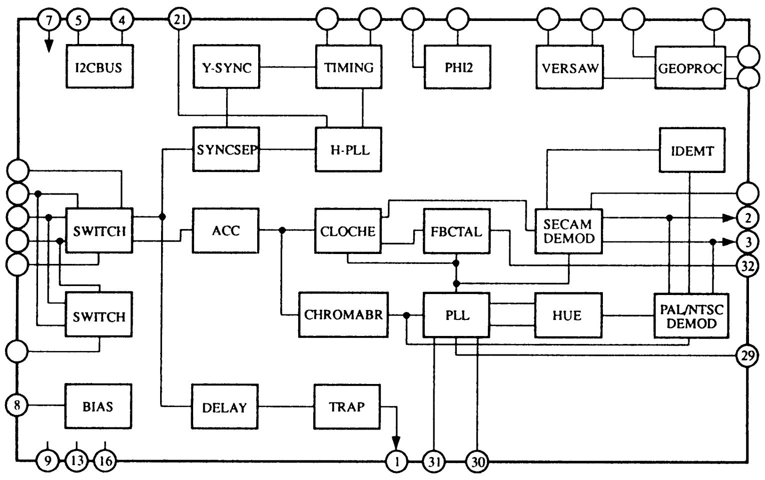
B-SS4873<AEP>-B..

B BOARD IC501 TDA2579B



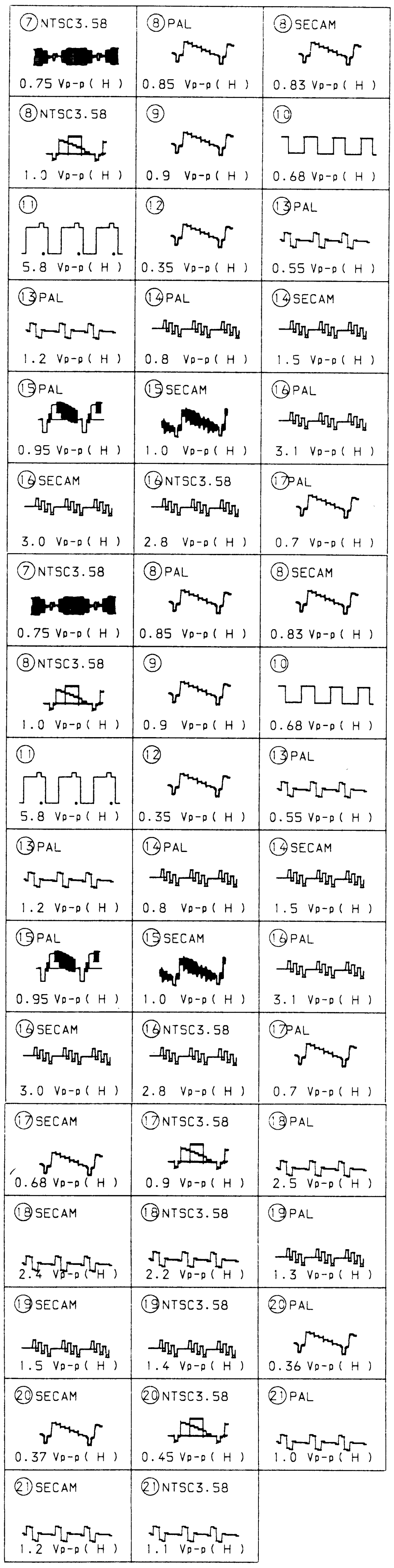
VERTICAL/ HORIZONTAL SYNC. SEPARATOR
PHASE DETECTOR φ1
SYNC.PULSE NOISE LEVEL DETECTOR
NOISE DETECTOR
START CIRCUIT STABILIZER
NOISE INVERTER
φ1 REFERENCE
ANTITOP
HORIZONTAL OSCILLATOR
SUPPLY SWITCH
COINCIDENCE DETECTOR
GATING
DIVIDER
VERTICAL BLANKING
BURST KEY
φ2 REFERENCE
HORIZONTAL OUTPUT
VIDEO TRANSMITTER IDENTIFICATION
VERTICAL ZENER REFERENCE
VERTICAL GUARD CIRCUIT
SANDCASTLE OUTPUT
FLYBACK PULSE PROTECTION
TOO LOW CURRENT PROTECTION
VERTICAL OSCILLATOR/ SAWTOOTH GENERATOR
VERTICAL COMPARATOR
VERTICAL OUTPUT
PULSE WIDTH MODULATOR
PHASE DETECTOR φ2

B BOARD IC1401 TDA9160/N2



7 5 4 21
I2CBUS
Y-SYNC
TIMING
PHI2
VERSAW
GEOPROC
SYNCSEP
H-PLL
IDEMT
SWITCH
ACC
CLOCHE
FBCTAL
SECAM DEMOD
SWITCH
CHROMABR
PLL
HUE
PAL/NTSC DEMOD
BIAS
DELAY
TRAP
8
9 13 16
1 31 30
2 3 32 29

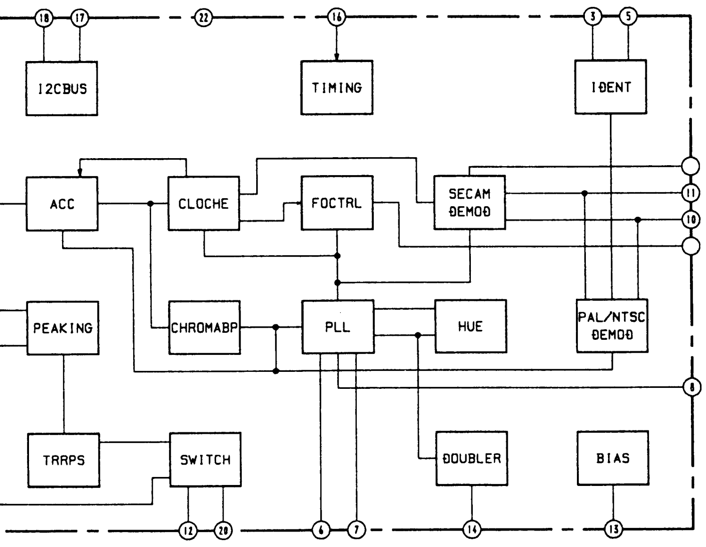
— B Board —



— B Board —

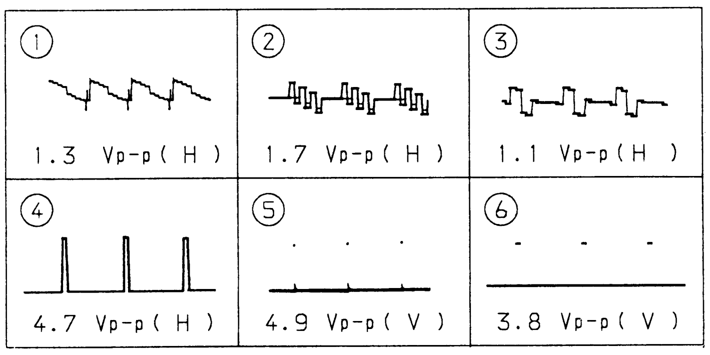
Ref. No.	Name	Function
IC301	TDA9145	CHROMA DECODER
IC302	TDA4661T	1H-DELAY
IC303	MC78L08ACPRP	8V REG
IC501	TDA2579B	H•V SYNC SEP
IC1401	TDA9160/N2	CHROMA DECODER
IC1402	TDA4661T	1H-DELAY
IC1403	SDA9187/2X	PIP
IC1404	SDA9188/3X	PIP
IC1405	SDA9086-5	PIP-PLL
IC1406	TDA844	RGB-SW
IC1407	TDA8443B	RGB-SW
IC1410	MC78L08ACPRP	8V REG
IC1411	MC78L05	5V REG
Q301	DTC124EK	PAL/NT SWITCH
Q302	2SA1037K	2 Fsc AMP
Q305	DTC144EK	PAL/NT SWITCH
Q310	2SC2412K	Y AMP
Q311	2SA1037K	Y CLAMP
Q313	2SC2412K	SSCP BUFFER
Q501	2SC2412K	H PULSE DRIVE
Q502	2SC2412K	H PULSE DRIVE
Q503	2SC2412K	H SYNC SEP
Q504	2SA1037K	BUFFER
Q505	DTC114EK	V PULSE DRIVE
Q506	DTA114EK	V PULSE DRIVE
Q507	2SC2412K	ID BUFFER
Q510	DTC114EX	VIDEO MUTE
Q1401	2SC2412K	Y AMP
Q1402	2SC2412K	R-Y BUFFER
Q1403	2SC2412K	B-Y BUFFER
Q1404	2SA1037K	Y BUFFER
Q1405	2SC2412K	BUFFER
Q1406	2SC2412K	BUFFER
Q1407	2SA1037K	BUFFER
Q1408	2SA1037K	BUFFER
Q1409	2SA1037K	BUFFER
Q1416	2SC2412K	V PULSE SEP
Q1417	DTC114EK	V PULSE INVERTER
Q1419	DTC114EK	V PULSE AMP
Q1421	2SC2412K	R-Y BUFFER
Q1422	2SA1037K	Y AMP
Q1423	2SC2412K	B-Y BUFFER
Q1424	2SC2412K	Y BUFFER
Q1425	2SC2412K	Y BUFFER
Q1426	DTC114EK	RESET SWITCH
Q1430	DTC114EK	SSCP SLICE
Q1431	DTA114EK	INVERTER
D301	DAN202K	LIMITTER
D304	MA3051L	PROTECT
D501	MA3056H	PROTECT
D1401	MA3051L	5V REG
D1405	DA204K	BIAS

1 TDA9145



18 17
22
16
3 5
I2CBUS
TIMING
IDENT
ACC
CLOCHE
FCCTRL
SECAM DEMOD
PEAKING
CHROMABP
PLL
HUE
PAL/NTSC DEMOD
TRAPS
SWITCH
DOUBLER
BIAS
11
1
10
8
12 20
6 7
14
15

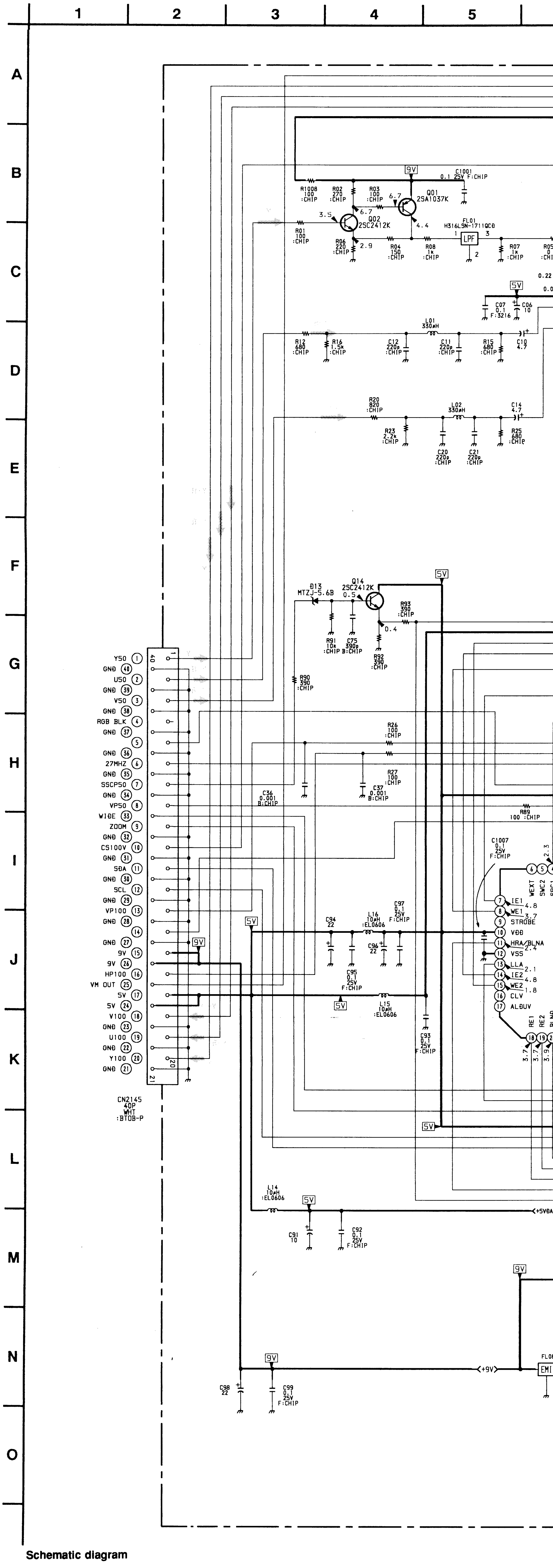
— Q Board —



①
1.3 Vp-p(H)
②
1.7 Vp-p(H)
③
1.1 Vp-p(H)
④
4.7 Vp-p(H)
⑤
4.9 Vp-p(V)
⑥
3.8 Vp-p(V)

— Q Board —

Ref. No.	Name	Function
IC1	TDA8755	A/D CONVERTOR
IC2	TMS4C2970	D-RAM
IC3	TMS4C2970	D-RAM
IC4	SAA4940H	NOISE REDUCTION
IC6	SAA4951	ECO-2 CONTROL
IC7	83C652	MICRO-COMPUTER
IC8	78L05	5V REG
IC9	MC74F08D	BUFFER
IC10	MC74F08D	BUFFER
IC11	78L05	5V REG
IC12	HEF4046BT	PLL
IC13	TC4SS66F	SWITCH
IC14	78L05	5V REG
IC15	TC4S66F	SWITCH
IC16	MC74F08D	BUFFER
IC17	SAA7158	BACK END
IC18	78L05	5V REG
IC19	TC4S66F	SWITCH
IC20	TC4S66F	SWITCH
IC21	TC4S66F	SWITCH
IC22	TC4S66F	SWITCH
Q1	2SA1037K	Y AMP
Q2	2SC2412K	Y AMP
Q8	BF550	BUFFER
Q9	2SC2412K	BUFFER
Q10	BF550	BUFFER
Q11	BF550	
Q12	2SA1037K	B-Y BUFFER
Q13		B-Y BUFFER
Q14	2SC2412K	BUFFER
Q16		BUFFER
Q17	DTC144EK	SWITCH
Q18	DTC144EK	SWITCH
Q20	2SA1037K	Y BUFFER
Q21	2SA1037K	R-Y AMP
Q22	2SC2412K	R-Y AMP
Q24	DTC144EK	SWITCH
D3	BBY40	VARI-CAP
D4	BAS16	SWITCH
D5	BAS16	SWITCH
D6	BAS16	PROTECT
D8	BBY40	VARI-CAP
D9	BAS16	LIMITTER
D10	BBY40	VARI-CAP
D11	BAS16	SWITCH
D12	BAS16	LIMITTER
D13	MA3056M	LEVEL SHIFT
D15	DAN202K	SWITCH
D16	DAN202K	SWITCH



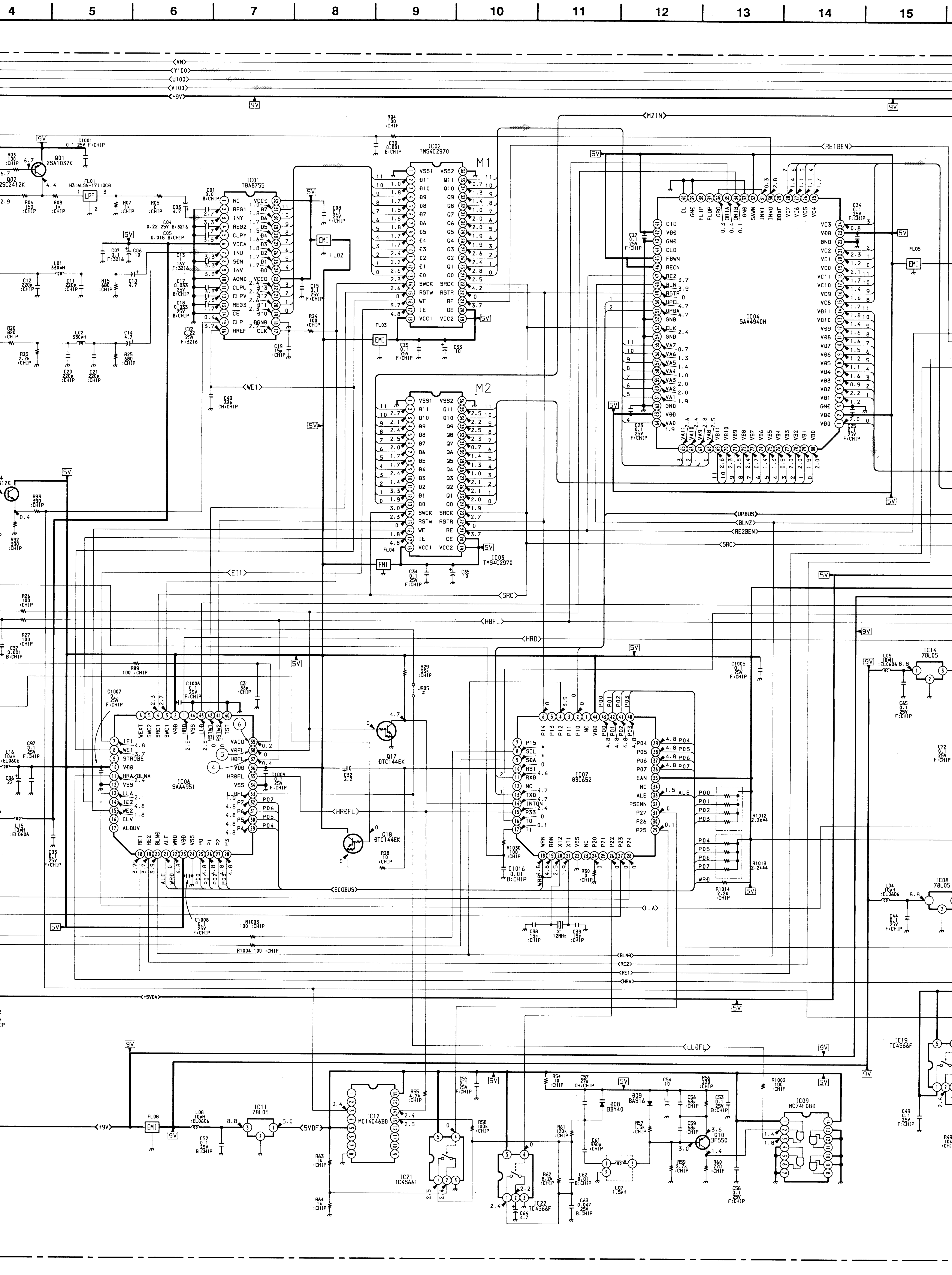
1
2
3
4
5
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
Q01 2SA1037K
Q02 2SC2412K
Q14 2SC2412K
D13 MTZJ-5.6B
FL01 H316LSN-1711QC0
LPF
L01 330μH
L02 330μH
CN2145 40P WHT :BTOB-P
Y50
U50
V50
RGB BLK
27MHZ
SSCP50
VP50
WIDE
ZOOM
CS100V
SDA
SCL
VP100
9V
HP100
VM OUT
5V
V100
U100
Y100
GND
5V
9V
+5VBA
+9V
IE1
WE1
STROBE
VDD
HRA/BLNA
VSS
LLA
IE2
WE2
CLV
ALBUV

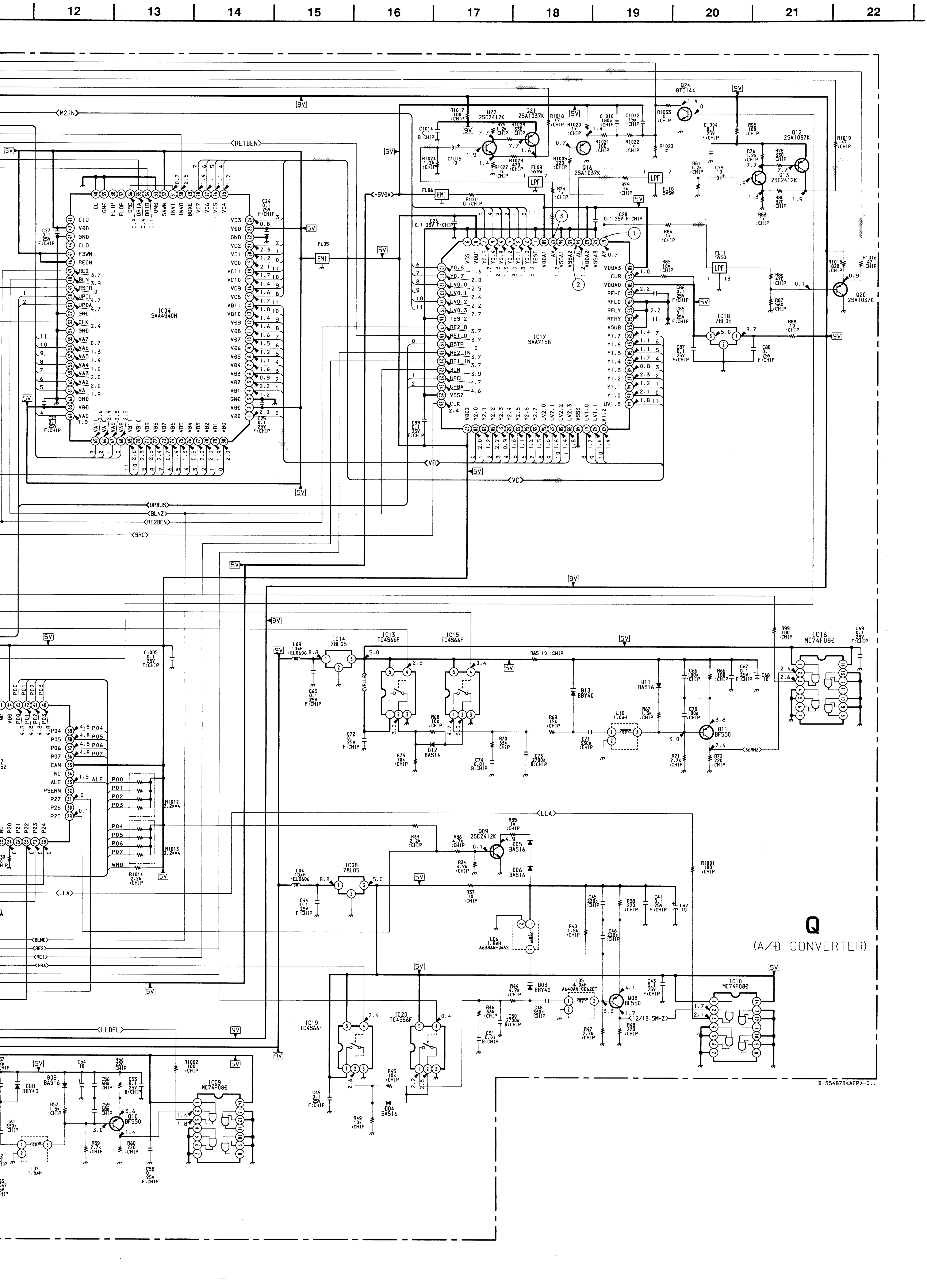
Schematic diagram

← B board

Schematic diagram

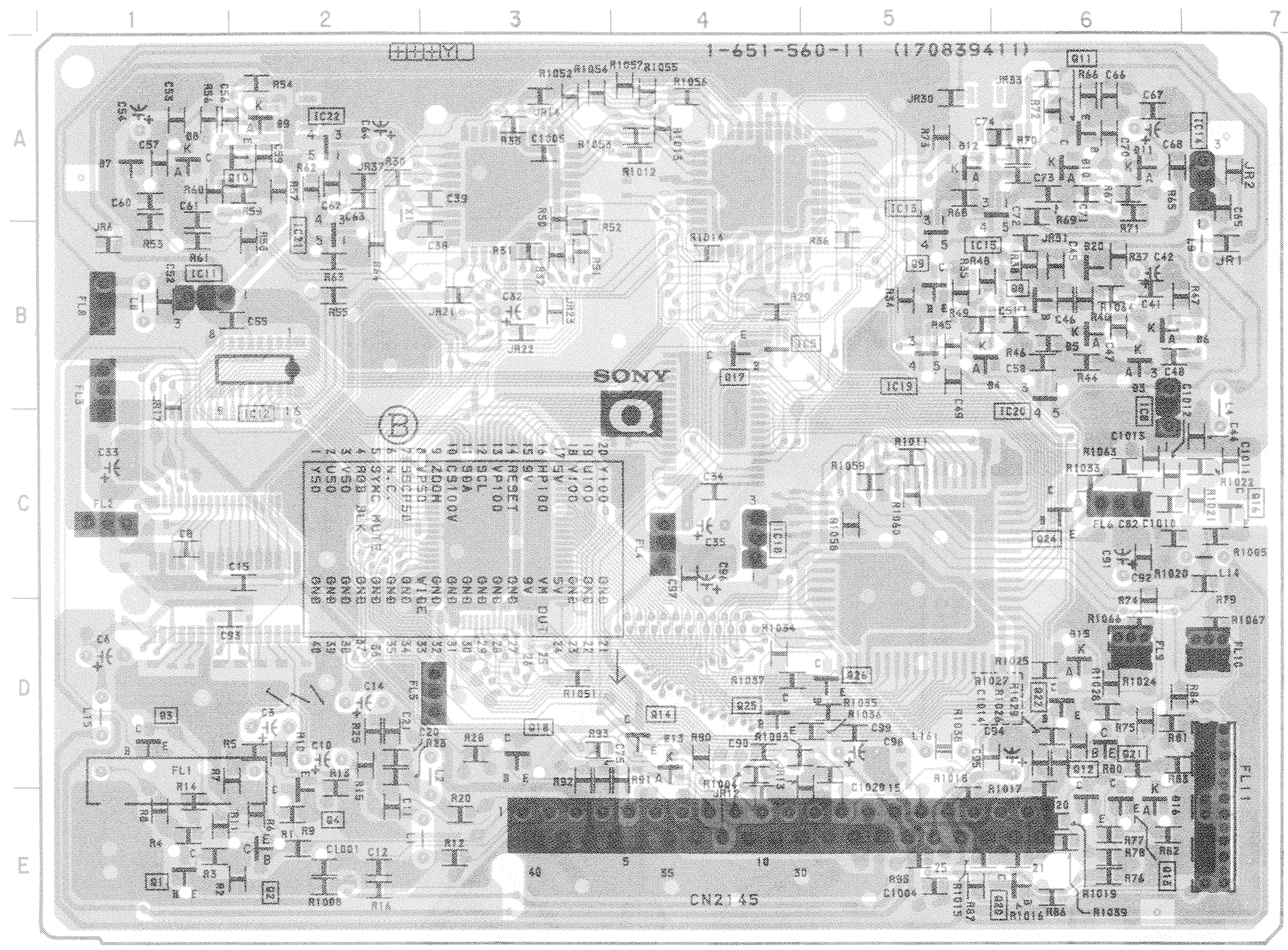
Q board →


4
5
6
7
8
9
10
11
12
13
14
15
VM
Y100
U100
V100
+9V
9V
5V
M2IN
RE1BEN
M1
M2
IC01
TDA8755
IC02
TMS4C2970
IC03
TMS4C2970
IC04
SAA4940H
IC06
SAA4951
IC07
83C652
IC08
78L05
IC09
MC74F08D
IC11
78L05
IC12
MC14046BD
IC14
78L05
IC19
TC4S66F
IC21
TC4S66F
IC22
TC4S66F
Q01
2SA1037K
Q02
2SC2412K
Q10
BF550
Q17
DTC144EK
Q18
DTC144EK
D08
BBY40
D09
BAS16
X1
12MHz
FL01
H316LSN-1711QCD
LPF
FL02
FL03
FL04
FL05
FL08
EMI
L01
330μH
L02
330μH
L04
10μH
:EL0606
L07
1.5μH
L08
10μH
:EL0606
L09
10μH
:EL0606
L15
10μH
:EL0606
L16
10μH
:EL0606
R03
100
:CHIP
R04
150
:CHIP
R05
0
:CHIP
R07
1k
:CHIP
R08
1k
:CHIP
R15
680
:CHIP
R20
820
:CHIP
R23
2.2k
:CHIP
R24
100
:CHIP
R25
680
:CHIP
R26
100
:CHIP
R27
100
:CHIP
R28
10
:CHIP
R29
33k
:CHIP
R30
0
:CHIP
R54
10
:CHIP
R55
4.7k
:CHIP
R56
220
:CHIP
R57
1.5k
:CHIP
R58
100k
:CHIP
R59
2.7k
:CHIP
R60
220
:CHIP
R61
120k
:CHIP
R62
8.2k
:CHIP
R63
1k
:CHIP
R64
1k
:CHIP
R89
100 :CHIP
R92
390
:CHIP
R93
390
:CHIP
R94
100
:CHIP
R1002
100
:CHIP
R1003
100 :CHIP
R1004 100 :CHIP
R1012
2.2k×4
R1013
2.2k×4
R1014
2.2k
:CHIP
R1030
100
:CHIP
C01
0.01
B:CHIP
C03
4.7
C04
0.22 25V B:3216
C05
0.018 B:CHIP
C06
10
C07
0.1
F:3216
C08
0.1
25V
F:CHIP
C10
4.7
C11
220p
:CHIP
C12
220p
:CHIP
C13
1
16V
F:3216
C14
4.7
C15
0.1
25V
F:CHIP
C17
0.033
25V
B:CHIP
C18
0.033
25V
B:CHIP
C19
15p
:CHIP
C20
220p
:CHIP
C21
220p
:CHIP
C22
0.22
25V
F:3216
C23
0.1
25V
F:CHIP
C24
0.1
25V
F:CHIP
C25
0.1
25V
F:CHIP
C27
0.1
25V
F:CHIP
C29
0.1
25V
F:CHIP
C30
0.001
B:CHIP
C31
33p
:CHIP
C32
2.2
C33
10
C34
0.1
25V
F:CHIP
C35
10
C37
0.001
B:CHIP
C38
15p
:CHIP
C39
15p
:CHIP
C40
33p
CH:CHIP
C44
0.1
25V
F:CHIP
C49
0.1
25V
F:CHIP
C52
0.1
25V
B:CHIP
C53
0.1
25V
B:CHIP
C54
10
C55
0.1
25V
F:CHIP
C56
68p
:CHIP
C57
27p
CH:CHIP
C58
0.1
25V
F:CHIP
C59
68p
:CHIP
C61
330p
:CHIP
C62
0.01
B:CHIP
C63
0.047
25V
B:CHIP
C64
4.7
C65
0.1
25V
F:CHIP
C72
0.1
25V
F:CHIP
C93
0.1
25V
F:CHIP
C96
22
C97
0.1
25V
F:CHIP
C1001
0.1 25V F:CHIP
C1005
0.1
25V
F:CHIP
C1006
0.1
25V
F:CHIP
C1007
0.1
25V
F:CHIP
C1008
0.1
25V
F:CHIP
C1009
0.1
25V
F:CHIP
C1016
0.01
B:CHIP
JR05
WE1
EI1
SRC
HDFL
HRD
UPBUS
BLNZ
RE2BEN
HRDFL
ECOBUS
LLA
BLND
RE2
RE1
HRA
+5VBA
LLDFL
5VDF
VSS1
VSS2
VCC1
VCC2
SWCK
SRCK
RSTW
RSTR
WE
RE
IE
OE
NC
REG1
INY
REG2
CLPY
VCCA
INU
SDN
INV
AGND
CLPU
CLPV
REG3
CE
CLP
HREF
VCCD
DGND
CLK
C10
VDD
GND
CLO
FBWN
RECN
RE2
BLN
RSTR
UPCL
UPDA
CLK
CL
FLIP
FLOP
DRD
DR1A
DR1B
SAWN
INVI
INVO
BDXE
WEXT
SWC2
SRC1
SWC1
HRD
LLD
RSTW2
RSTR
TST
VACO
VDFL
HDFL
STROBE
HRA/BLNA
LLA
IE1
WE1
IE2
WE2
CLV
ALBUV
P14
P13
P12
P11
P10
P00
P01
P02
P03
P04
P05
P06
P07
P15
SCL
SDA
RST
RXD
TXD
INTD
P33
T0
T1
EAN
ALE
PSENN
P27
P26
P25
WRN
RDN
XT2
XT1
P20
P21
P22
P23
P24
WRD

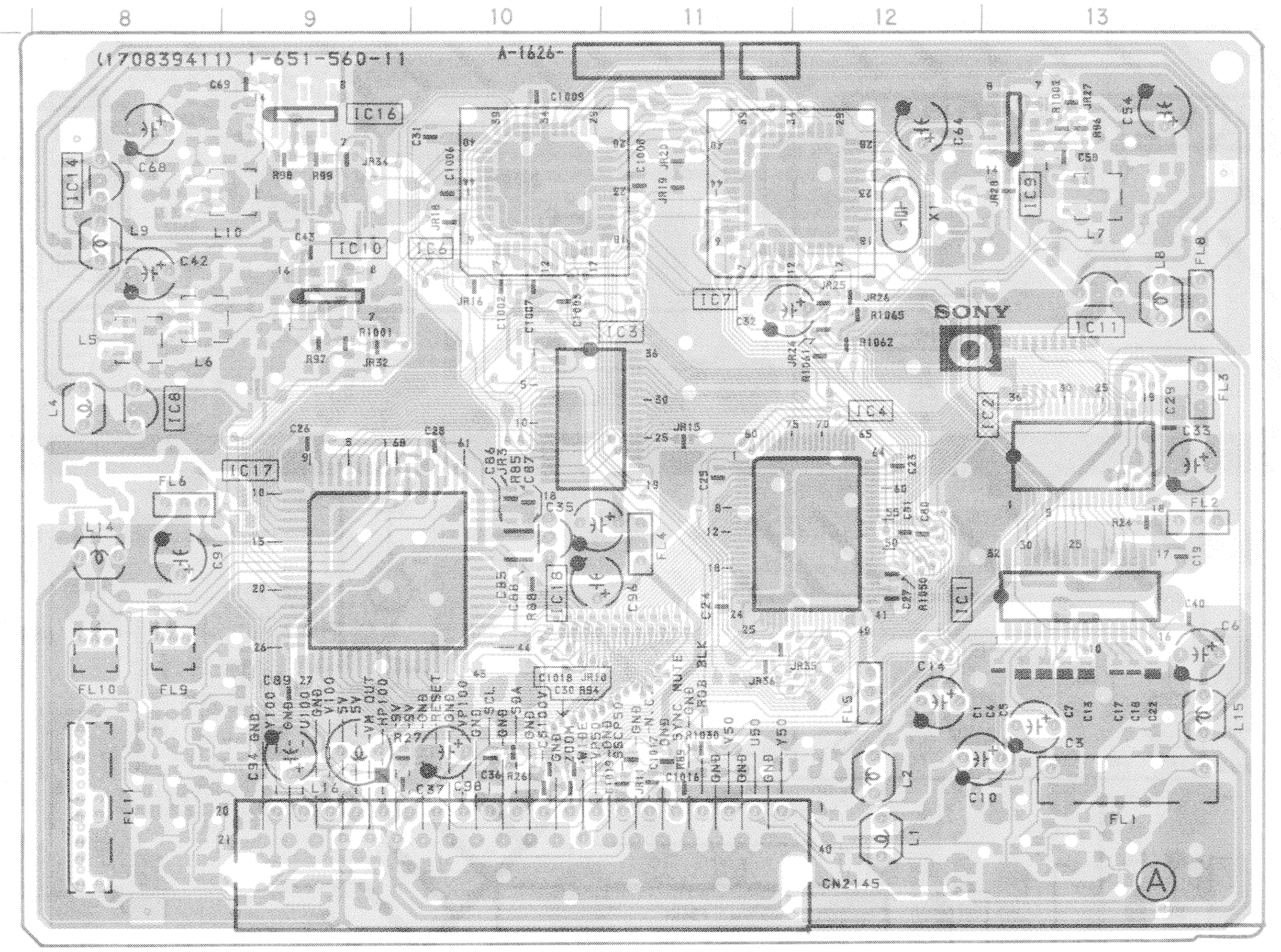

12
13
14
15
16
17
18
19
20
21
22
IC04 SAA4940H
IC17 SAA7158
IC18 78L05
IC14 78L05
IC13 TC4S66F
IC15 TC4S66F
IC16 MC74F08D
IC08 78L05
IC19 TC4S66F
IC20 TC4S66F
IC10 MC74F08D
IC09 MC74F08D
Q24 DTC144
Q22 2SC2412K
Q21 2SA1037K
Q16 2SA1037K
Q12 2SA1037K
Q13 2SC2412K
Q20 2SA1037K
Q11 BF550
Q09 2SC2412K
Q08 BF550
Q10 BF550
D10 BBY40
D11 BAS16
D12 BAS16
D05 BAS16
D06 BAS16
D03 BBY40
D04 BAS16
D08 BBY40
D09 BAS16
L06 1.8µH A638AN-0462
L05 4.0µH A640AN-0062ET
L10 1.0µH
L07 1.5µH
L09 10µH :EL0606
L04 10µH :EL0606
FL05 EMI
FL06 EMI
FL09 5VSW LPF
FL10 5VSW LPF
FL11 5VSQ LPF
<M2IN>
<RE1BEN>
<+5VDA>
<VB>
<VC>
<UPBUS>
<BLNZ>
<RE2BEN>
<SRC>
<LLA>
<BLND>
<RE2>
<RE1>
<HRA>
<LLDFL>
<36MHZ>
<12/13.5MHZ>
5V
9V
Q
(A/Ð CONVERTER)
B-SS4873<AEP>-Q..

Q [BACKEND A/D CONVERTOR, NOISE REDUCTION, MICRO-COMPUTER, ECO-2 CONTROL]

— Q Board — <Conductor Side>


1
2
3
4
5
6
7
A
B
C
D
E
1-651-560-11 (170839411)
SONY
CN2145
IC22
IC11
IC12
IC13
IC15
IC19
IC20
IC21
IC8
IC18
FL1
FL2
FL3
FL11

— Q Board — <Component Side>

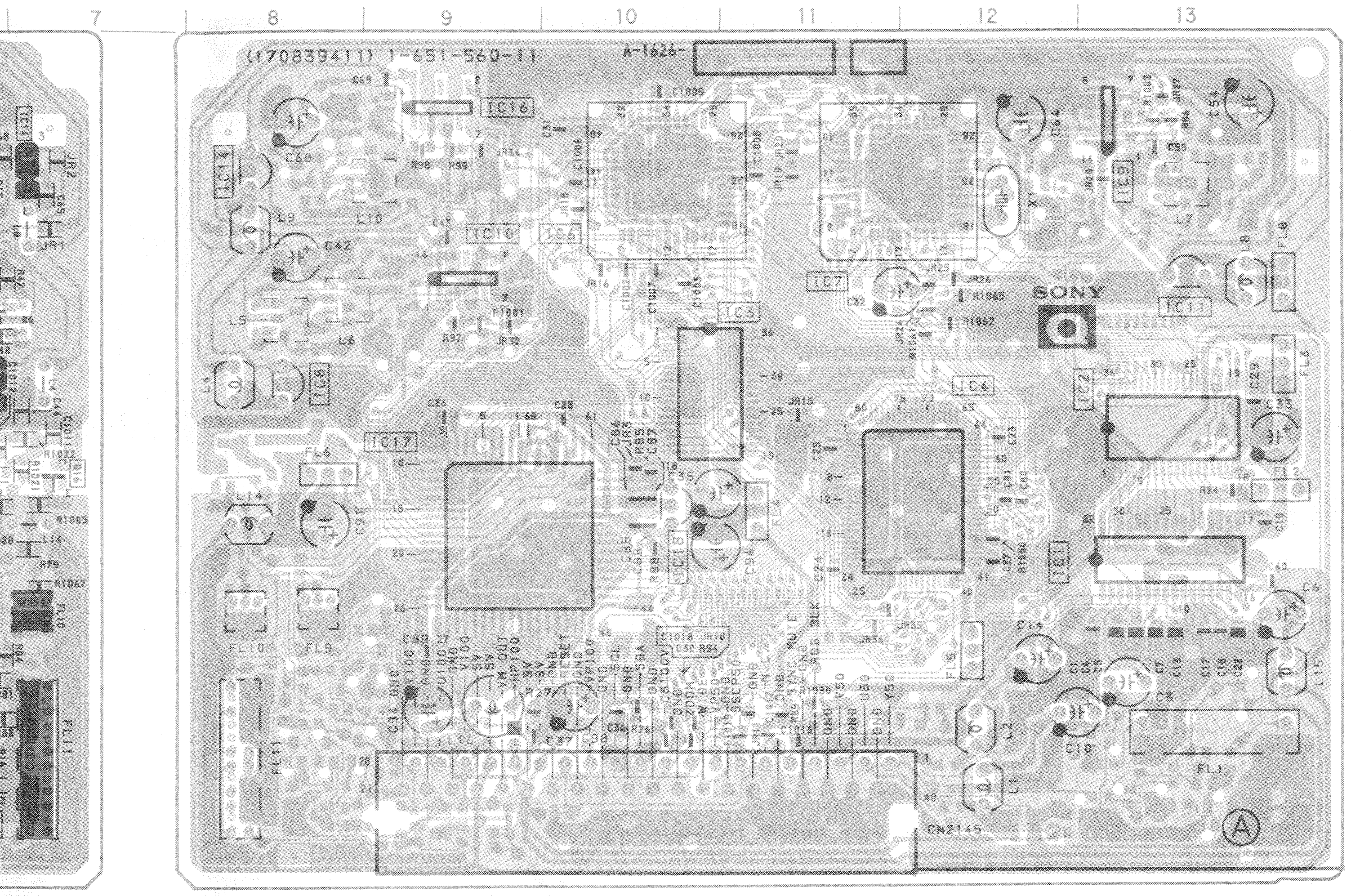

8
9
10
11
12
13
(170839411) 1-651-560-11
A-1626-
SONY
CN2145
IC1
IC2
IC3
IC4
IC6
IC7
IC9
IC10
IC14
IC16
IC17
FL1
FL6
FL9
FL10

- ▨ : Pattern from the side which enables seeing.
- ▨ : Pattern of the rear side.

— Q Board

IC	
IC1	C-13
IC2	C-13
IC3	B-10
IC4	C-12
IC6	A-10
IC7	A-12
IC8	B-6
IC9	A-13
IC10	B-9
IC11	B-1
IC12	B-2
IC13	B-5
IC14	A-7
IC15	B-6
IC16	A-9
IC17	C-9
IC18	C-4
IC19	B-5
IC20	B-6
IC21	B-2
IC22	A-2
TRANSISTOR	
Q1	E-1
Q2	E-2

— Q Board — <Component Side>


7
8
9
10
11
12
13
(170839411) 1-651-560-11
A-1626-
IC16
IC14
IC10
IC6
IC7
IC3
IC9
IC11
IC8
IC17
IC4
IC2
IC1
IC18
SONY
Q
C68
C42
L9
L10
L5
L6
L4
L7
L8
FL6
FL8
FL5
FL2
FL4
FL10
FL9
FL11
FL1
L14
L15
L16
L1
L2
X1
C54
C64
C33
C35
C96
C91
C14
C10
C3
C6
C37
C34
C89
CN2145
A

— Q Board —

IC	
IC1	C-13
IC2	C-13
IC3	B-10
IC4	C-12
IC6	A-10
IC7	A-12
IC8	B-6
IC9	A-13
IC10	B-9
IC11	B-1
IC12	B-2
IC13	B-5
IC14	A-7
IC15	B-6
IC16	A-9
IC17	C-9
IC18	C-4
IC19	B-5
IC20	B-6
IC21	B-2
IC22	A-2

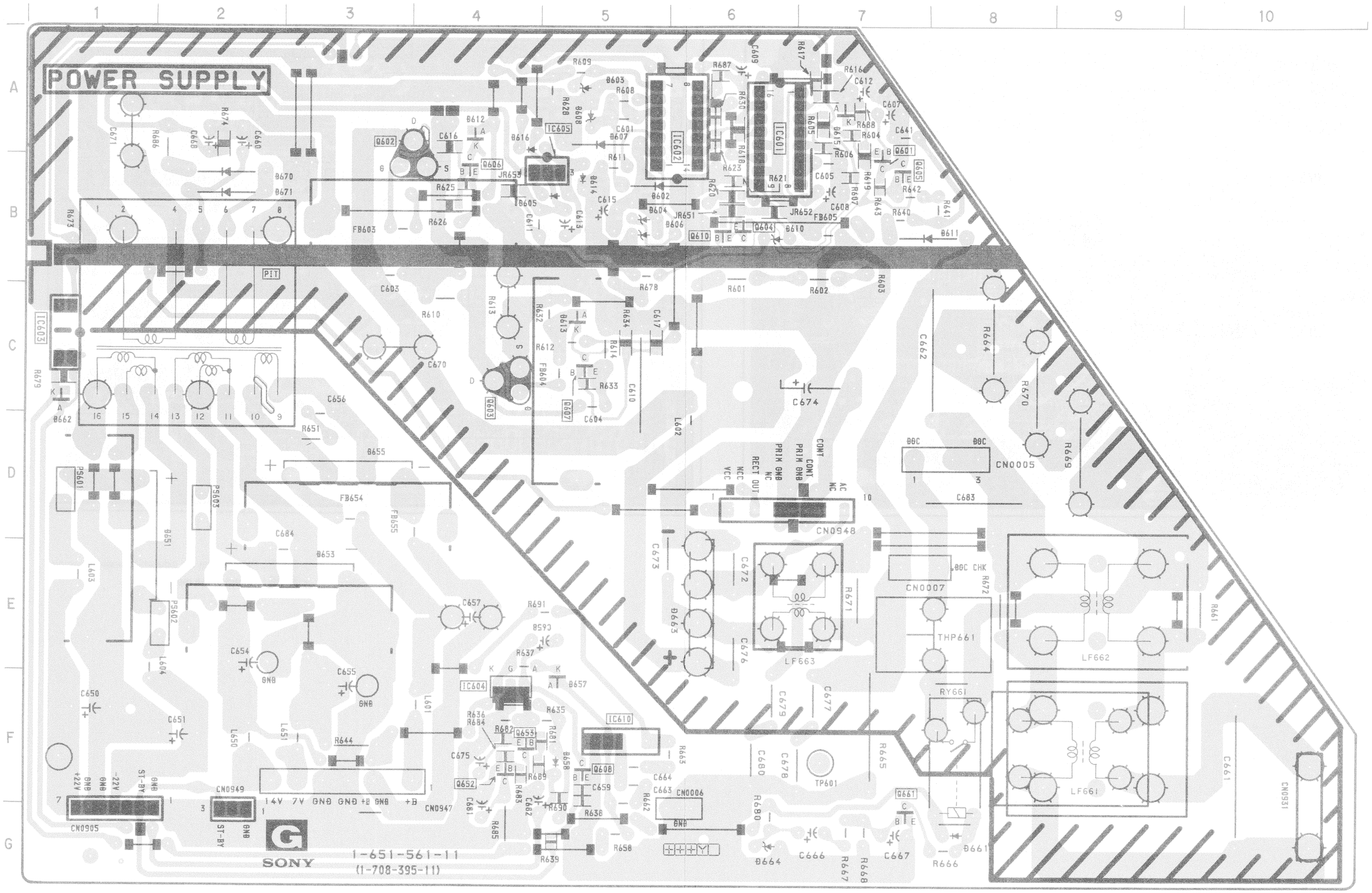
TRANSISTOR	
Q1	E-1
Q2	E-2
Q8	B-6
Q9	B-5
Q10	A-2
A11	A-6
Q12	D-6
Q13	E-6
Q14	D-4
Q16	C-7
Q17	B-4
Q18	D-3
Q20	E-6
Q21	D-6
Q22	D-6

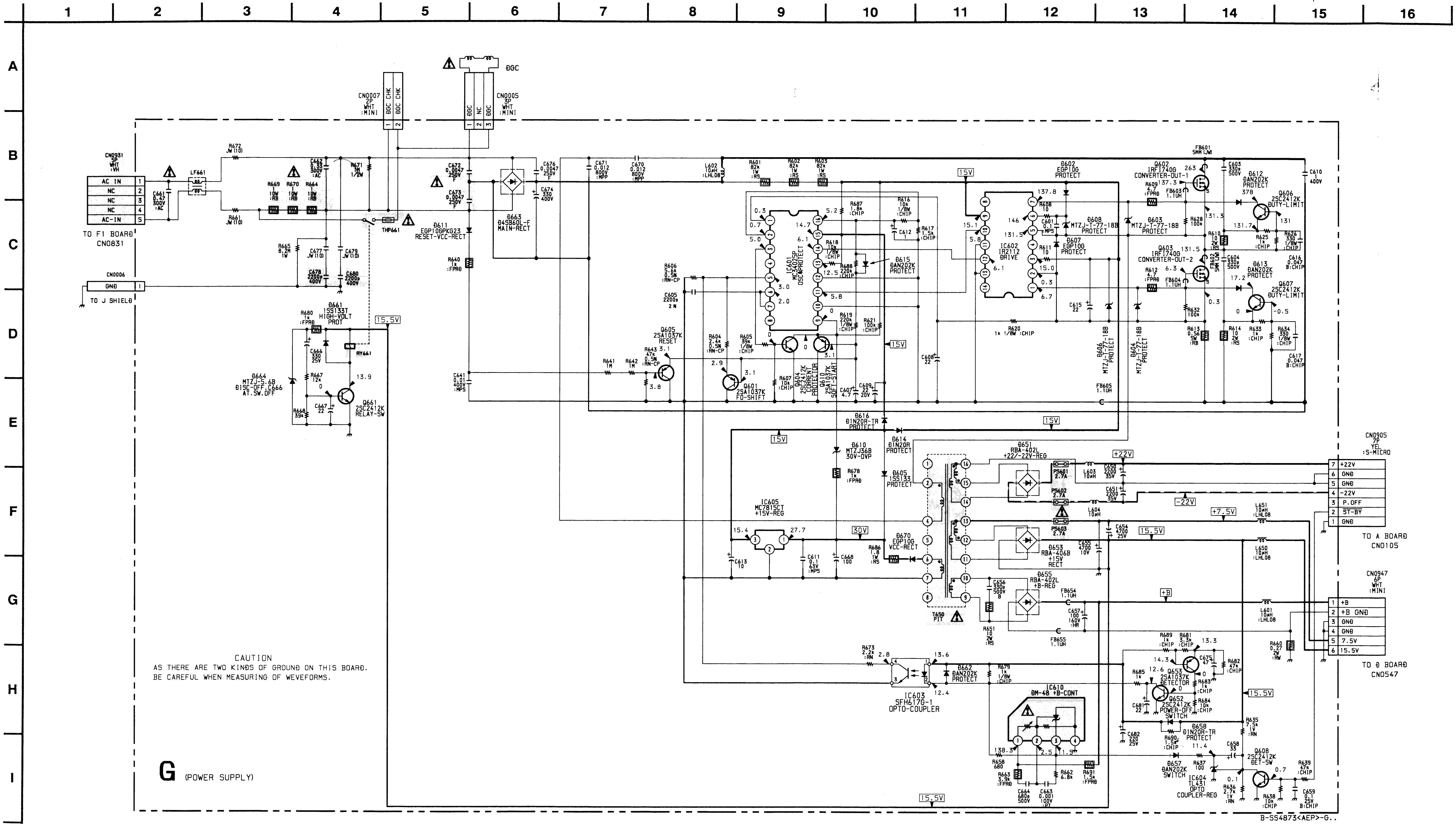
DIODE	
D3	B-6
D4	B-5
D5	B-6
D6	B-6
D8	A-1
D9	A-2
D10	A-6
D11	A-6
D12	A-5
D13	D-4
D15	D-6
D16	E-6

- ▨ : Pattern from the side which enables seeing.
- ▨ : Pattern of the rear side.

G [POWER SUPPLY]

— G Board —


1 2 3 4 5 6 7 8 9 10
A B C D E F G
POWER SUPPLY
IC601
IC602
IC603
IC604
IC605
IC610
Q601
Q602
Q603
Q604
Q605
Q606
Q607
Q608
Q610
Q652
Q653
Q661
PIT
CN0005
CN0006
CN0007
CN0905
CN0931
CN0947
CN0948
CN0949
LF661
LF662
LF663
THP661
RY661
TP601
FB603
FB604
FB605
FB654
FB655
PS601
PS602
PS603
L601
L602
L603
L604
L650
L651
+22V GND GND -22V ST-BY GND
ST-BY GND
14V 7V GND GND +B GND +B
VCC NCC RECT OUT NC PRIM GND PRIM GND CONT CONT AC NC
DGC CHK
G
SONY
1-651-561-11
(1-708-395-11)



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I
ÐGC
CN0007 2P WHT :MINI
ÐGC CHK
CN0005 3P WHT :MINI
CN0931 5P WHT :VH
AC IN
NC
AC-IN
TO F1 BOARÐ CN0831
CN0006
GNÐ
TO J SHIELÐ
LF661
THP661
RY661
Ð661 1SS133T HIGH-VOLT PROT
Ð664 MTZJ-5.6B ÐISC-OFF.C666 AT.SW.OFF
Q661 2SC2412K RELAY-SW
Ð611 EGP10GPKG23 RESET-VCC-RECT
Ð663 Ð4SB60L-F MAIN-RECT
Q605 2SA1037K RESET
Q601 2SA1037K FD-SHIFT
Q604 2SC2412K CURRENT PROTECTOR
Q610 2SA1037K SOFT-START
IC601 MC34025P OSC&PROTECT
Ð615 ÐAN202K PROTECT
IC602 IR2112 ÐRIVE
Ð602 EGP10G PROTECT
Ð607 EGP10G PROTECT
Ð608 MTZJ-T-77-18B
Ð603 MTZJ-T-77-18B PROTECT
Ð606 MTZJ-T-77-18B PROTECT
Ð604 MTZJ-T-77-18B PROTECT
Q602 IRF1740G CONVERTER-OUT-1
Q603 IRF1740G CONVERTER-OUT-2
Ð612 ÐAN202K PROTECT
Ð613 ÐAN202K PROTECT
Q606 2SC2412K ÐUTY-LIMIT
Q607 2SC2412K ÐUTY-LIMIT
FB601 5MM (JW)
Ð616 Ð1N20R-TR PROTECT
Ð614 Ð1N20R PROTECT
Ð610 MTZJ36B 30V-OVP
Ð605 1SS133 PROTECT
IC605 MC7815CT +15V-REG
Ð670 EGP10G VCC-RECT
T650 PIT
Ð651 RBA-402L +22/-22V-REG
Ð653 RBA-406B +15V RECT
Ð655 RBA-402L +B-REG
PS601 2.7A
PS602 2.7A
PS603 2.7A
15V
15.5V
30V
+22V
-22V
+7.5V
+B
CN0905 7P YEL :S-MICRO
+22V
GNÐ
GNÐ
-22V
P.OFF
ST-BY
GNÐ
TO A BOARÐ CN0105
CN0947 6P WHT :MINI
+B
+B GNÐ
GNÐ
GNÐ
7.5V
15.5V
TO Ð BOARÐ CN0547
IC603 SFH617G-1 OPTO-COUPLER
Ð662 ÐAN202K PROTECT
IC610 BM-48 +B-CONT
Q653 2SA1037K ÐETECTOR
Q652 2SC2412K POWER-OFF SWITCH
Ð658 Ð1N20R-TR PROTECT
Ð657 ÐAN202K SWITCH
IC604 TL431 OPTO COUPLER-REG
Q608 2SC2412K ÐET-SW

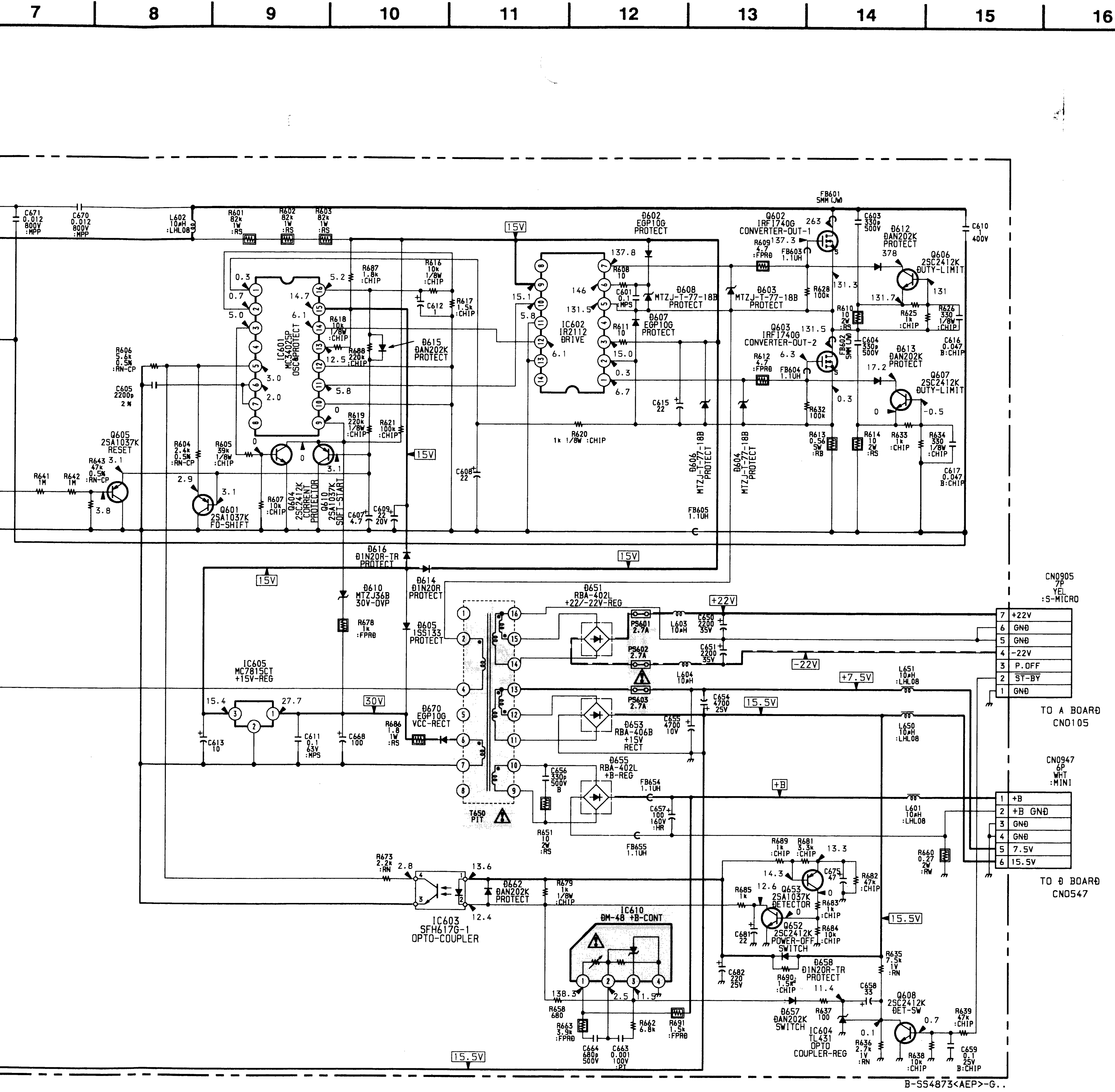
CAUTION
AS THERE ARE TWO KINÐS OF GROUNÐ ON THIS BOARÐ.
BE CAREFUL WHEN MEASURING OF WEVEFORMS.

G (POWER SUPPLY)

B-SS4873<AEP>-G..

Sche

← G


7
8
9
10
11
12
13
14
15
16
IC601 MC34025P OSC&PROTECT
IC602 IR2112 DRIVE
Q602 IRF1740G CONVERTER-OUT-1
Q603 IRF1740G CONVERTER-OUT-2
Q612 DAN202K PROTECT
Q606 2SC2412K DUTY-LIMIT
Q613 DAN202K PROTECT
Q607 2SC2412K DUTY-LIMIT
D602 EGP10G PROTECT
D608 MTZJ-T-77-18B PROTECT
D603 MTZJ-T-77-18B PROTECT
D607 EGP10G PROTECT
Q615 DAN202K PROTECT
Q605 2SA1037K RESET
Q601 2SA1037K FO-SHIFT
Q604 2SC2412K CURRENT PROTECTOR
Q610 2SA1037K SOFT-START
D606 MTZJ-T-77-18B PROTECT
D604 MTZJ-T-77-18B PROTECT
D616 D1N20R-TR PROTECT
D614 D1N20R PROTECT
D610 MTZJ36B 30V-OVP
D605 1SS133 PROTECT
D670 EGP10G VCC-RECT
IC605 MC7815CT +15V-REG
D651 RBA-402L +22/-22V-REG
D653 RBA-406B +15V RECT
D655 RBA-402L +B-REG
T650 PIT
PS601 2.7A
PS602 2.7A
PS603 2.7A
IC603 SFH617G-1 OPTO-COUPLER
D662 DAN202K PROTECT
IC610 BM-48 +B-CONT
Q653 2SA1037K DETECTOR
Q652 2SC2412K POWER-OFF SWITCH
D658 D1N20R-TR PROTECT
D657 DAN202K SWITCH
IC604 TL431 OPTO COUPLER-REG
Q608 2SC2412K DET-SW
15V
30V
+22V
-22V
+7.5V
15.5V
+B
CN0905 7P YEL :S-MICRO
7 +22V
6 GND
5 GND
4 -22V
3 P.OFF
2 ST-BY
1 GND
TO A BOARD CN0105
CN0947 6P WHT :MINI
1 +B
2 +B GND
3 GND
4 GND
5 7.5V
6 15.5V
TO D BOARD CN0547
B-SS4873<AEP>-G..

Schematic diagram

← G board

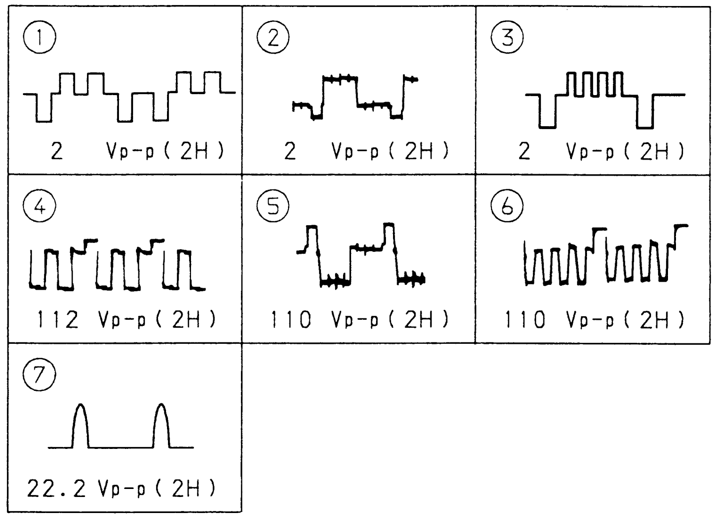
Schematic diagram

C board →

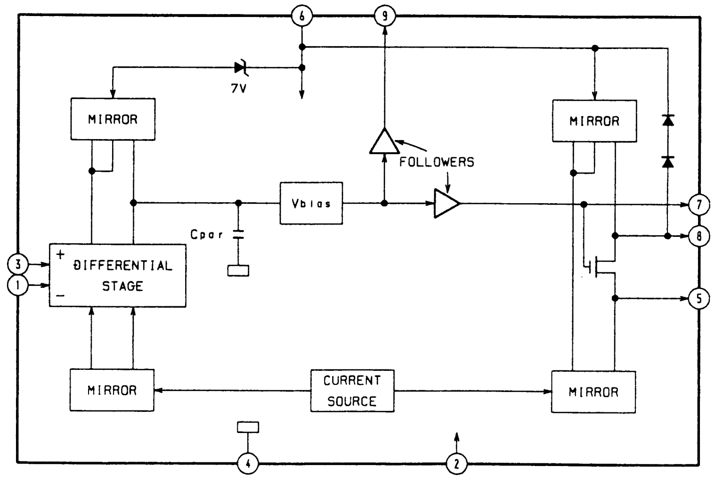
— C Board —

Ref. No.	Name	Function
IC703	TDA6111Q	VIDEO OUT (RED)
IC704	TDA6111Q	VIDEO OUT (GREEN)
IC705	TDA6111Q	VIDEO OUT (BLUE)
Q701	2SC2551	STANDBY SWITCH
Q702	2SC2551	STANDBY SWITCH
Q703	2SC2551	STANDBY SWITCH
Q704	2SA1037K	VOLTAGE MONITOR
Q705	TDA144EK	SWITCH ON MUTE
Q706	2SC2412K	SWITCH OFF DELAY
D701	1SS133T-77	IK (RED)
D702	1SS83	SWITCH
D703	1SS83	SWITCH
D704	1SS83	
D705	1SS133T-77	IK (GREEN)
D706	1SS133T-77	STANDBY SUPPLY
D707	1SS133T-77	SWITCH ON MUTE
D710	1SS133T-77	STANDBY SUPPLY
D712	MTZJ-9.1	PROTECT
D714	MTZJ13B	REF VOLTAGE
D715	1SS119	SWITCH
D716	1SS119	
D717	1SS119	

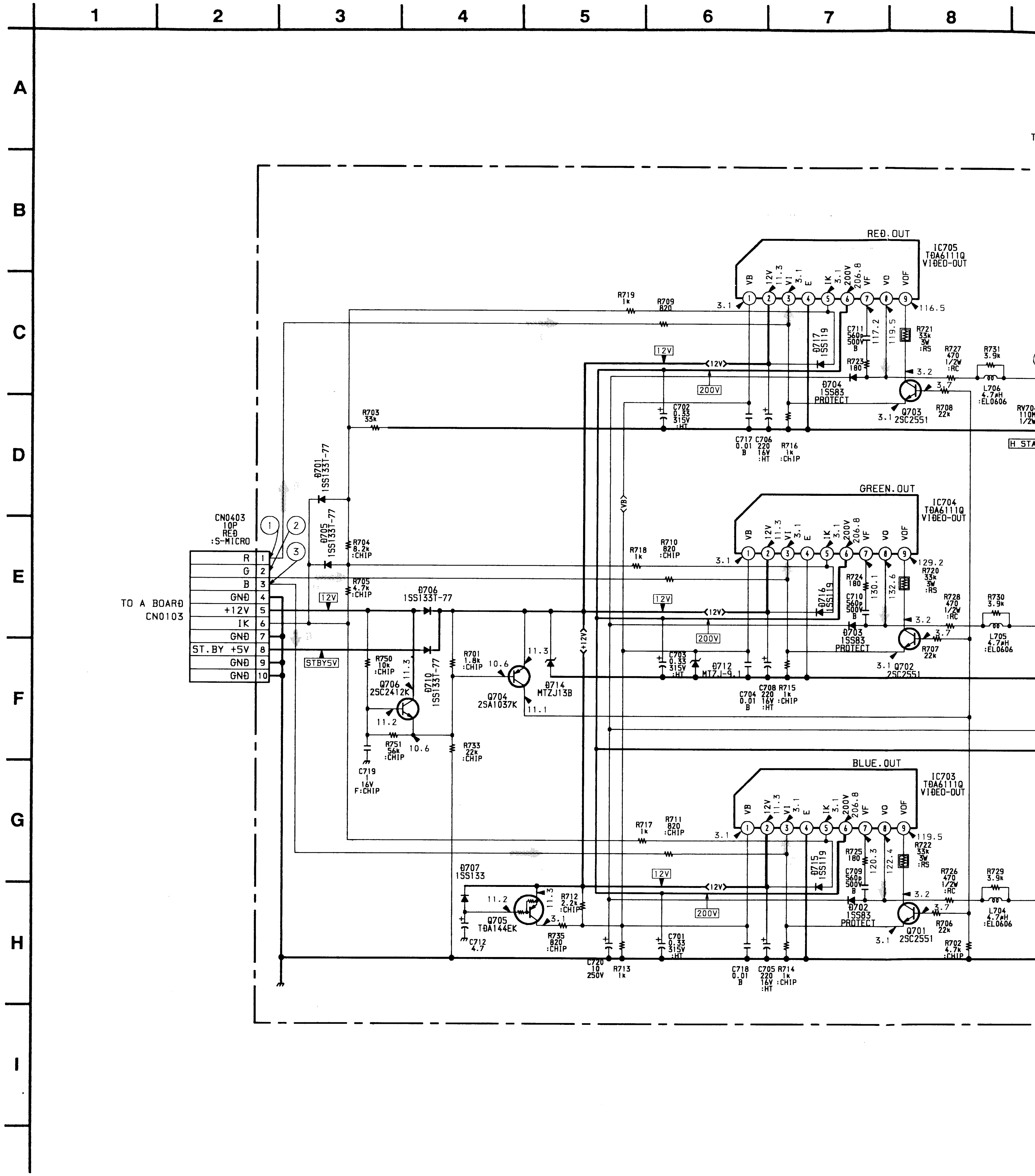
— C Board —



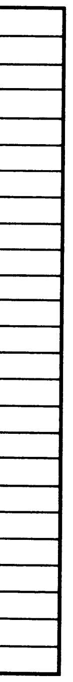
C BOARD IC703,704,705 TDA6111Q

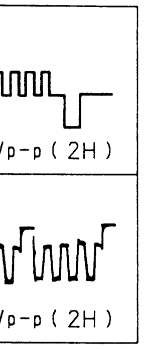


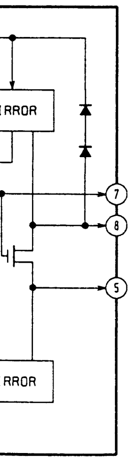
⑥
⑨
7V
MIRROR
MIRROR
FOLLOWERS
Vbias
Cpar
DIFFERENTIAL STAGE
+
−
③
①
⑦
⑧
⑤
MIRROR
CURRENT SOURCE
MIRROR
④
②

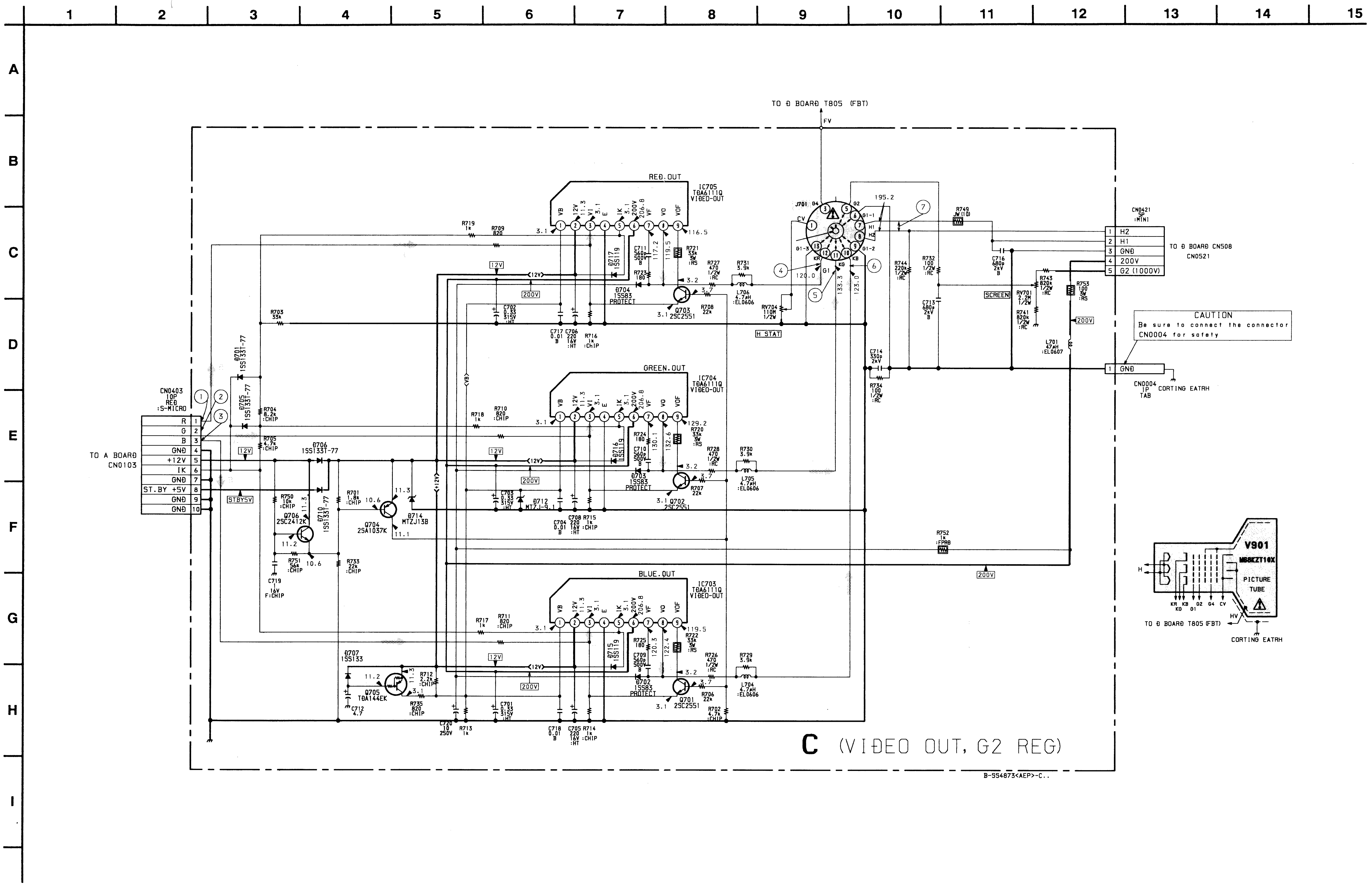


1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
I
RED.OUT
IC705
TDA6111Q
VIDEO-OUT
GREEN.OUT
IC704
TDA6111Q
VIDEO-OUT
BLUE.OUT
IC703
TDA6111Q
VIDEO-OUT
VB
12V
VI
E
IK
VF
VO
VOF
CN0403
10P
RED
:S-MICRO
TO A BOARD
CN0103
R
G
B
GND
+12V
IK
GND
ST.BY +5V
GND
GND
12V
200V
STBY5V
D701
1SS133T-77
D705
1SS133T-77
D706
1SS133T-77
D707
1SS133
D710
1SS133T-77
Q706
2SC2412K
Q704
2SA1037K
Q705
TDA144EK
D714
MTZJ13B
D712
MTZJ-9.1
D704
1SS83
PROTECT
D703
1SS83
PROTECT
D702
1SS83
PROTECT
Q703
2SC2551
Q702
2SC2551
Q701
2SC2551
D717
1SS119
D716
1SS119
D715
1SS119
R703
33k
R704
8.2k
:CHIP
R705
4.7k
:CHIP
R750
10k
:CHIP
R751
56k
:CHIP
C719
1
16V
F:CHIP
R733
22k
:CHIP
R701
1.8k
:CHIP
C712
4.7
R712
2.2k
:CHIP
R735
820
:CHIP
C720
10
250V
R713
1k
R719
1k
R709
820
R718
1k
R710
820
:CHIP
R717
1k
R711
820
:CHIP
C702
0.33
315V
:HT
C703
0.33
315V
:HT
C701
0.33
315V
:HT
C717
0.01
B
C706
220
16V
:HT
R716
1k
:CHIP
C704
0.01
B
C708
220
16V
:HT
R715
1k
:CHIP
C718
0.01
B
C705
220
16V
:HT
R714
1k
:CHIP
C711
560p
500V
B
C710
560p
500V
B
C709
560p
500V
B
R723
180
R724
180
R725
180
R721
33k
3W
:RS
R720
33k
3W
:RS
R722
33k
3W
:RS
R727
470
1/2W
:RC
R728
470
1/2W
:RC
R726
470
1/2W
:RC
R731
3.9k
R730
3.9k
R729
3.9k
L706
4.7μH
:EL0606
L705
4.7μH
:EL0606
L704
4.7μH
:EL0606
R708
22k
R707
22k
R706
22k
R702
4.7k
:CHIP
3.1
116.5
117.2
119.5
3.2
3.7
129.2
130.1
132.6
120.3
122.4
11.3
10.6
11.2
11.1
206.8
H STA




Vp-p (2H)
Vp-p (2H)


RROR
RROR
7
8
5


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
G
H
I
TO Ð BOARÐ T805 (FBT)
FV
REÐ.OUT
IC705
TÐA6111Q
VIÐEO-OUT
GREEN.OUT
IC704
TÐA6111Q
VIÐEO-OUT
BLUE.OUT
IC703
TÐA6111Q
VIÐEO-OUT
VB
12V
11.3
VI
3.1
E
IK
3.1
200V
206.8
VF
VO
VOF
116.5
129.2
119.5
J701
CV
G1-3
G1
KR
KG
KB
G1-2
G1-1
G2
G4
H1
H2
195.2
120.0
133.3
123.0
R749
JW(10)
CN0421
5P
:MINI
H2
H1
GNÐ
200V
G2 (1000V)
TO Ð BOARÐ CN508
CN0521
CN0004
1P
TAB
CORTING EATRH
GNÐ
CN0403
10P
REÐ
:S-MICRO
R
G
B
GNÐ
+12V
IK
GNÐ
ST.BY +5V
GNÐ
GNÐ
TO A BOARÐ
CN0103
12V
200V
STBY5V
H STAT
SCREEN
Q703
2SC2551
Q702
2SC2551
Q701
2SC2551
Q704
2SA1037K
Q705
TÐA144EK
Q706
2SC2412K
Ð701
1SS133T-77
Ð705
1SS133T-77
Ð706
1SS133T-77
Ð710
1SS133T-77
Ð707
1SS133
Ð712
MTZJ-9.1
Ð714
MTZJ13B
Ð717
1SS119
Ð716
1SS119
Ð715
1SS119
Ð704
1SS83
PROTECT
Ð703
1SS83
PROTECT
Ð702
1SS83
PROTECT
R703 33k
R704 8.2k :CHIP
R705 4.7k :CHIP
R701 1.8k :CHIP
R733 22k :CHIP
R750 10k :CHIP
R751 56k :CHIP
R719 1k
R709 820
R718 1k
R710 820 :CHIP
R717 1k
R711 820 :CHIP
R721 33k 3W :RS
R720 33k 3W :RS
R722 33k 3W :RS
R723 180
R724 180
R725 180
R727 470 1/2W :RC
R728 470 1/2W :RC
R726 470 1/2W :RC
R731 3.9k
R730 3.9k
R729 3.9k
R708 22k
R707 22k
R706 22k
R702 4.7k :CHIP
R712 2.2k :CHIP
R735 820 :CHIP
R713 1k
R714 1k :CHIP
R715 1k :CHIP
R716 1k :CHIP
R744 220k 1/2W :RC
R732 100 1/2W :RC
R734 100 1/2W :RC
R743 820k 1/2W :RC
R741 820k 1/2W :RC
R753 100 3W :RS
R752 1k :FPRÐ
RV701 2.2M 1/2W
RV704 110M 1/2W
L706 4.7μH :EL0606
L705 4.7μH :EL0606
L704 4.7μH :EL0606
L701 47μH :EL0607
C711 560p 500V B
C710 560p 500V B
C709 560p 500V B
C702 0.33 315V :HT
C703 0.33 315V :HT
C701 0.33 315V :HT
C717 0.01 B
C706 220 16V :HT
C704 0.01 B
C708 220 16V :HT
C718 0.01 B
C705 220 16V :HT
C719 1 16V F:CHIP
C712 4.7
C720 10 250V
C716 680p 2kV B
C713 680p 2kV B
C714 330p 2kV
V901
M68KZT10X
PICTURE TUBE
H
KR KB G2 G4 CV
KG G1
HV
TO Ð BOARÐ T805 (FBT)
CORTING EATRH
①
②
③
④
⑤
⑥
⑦

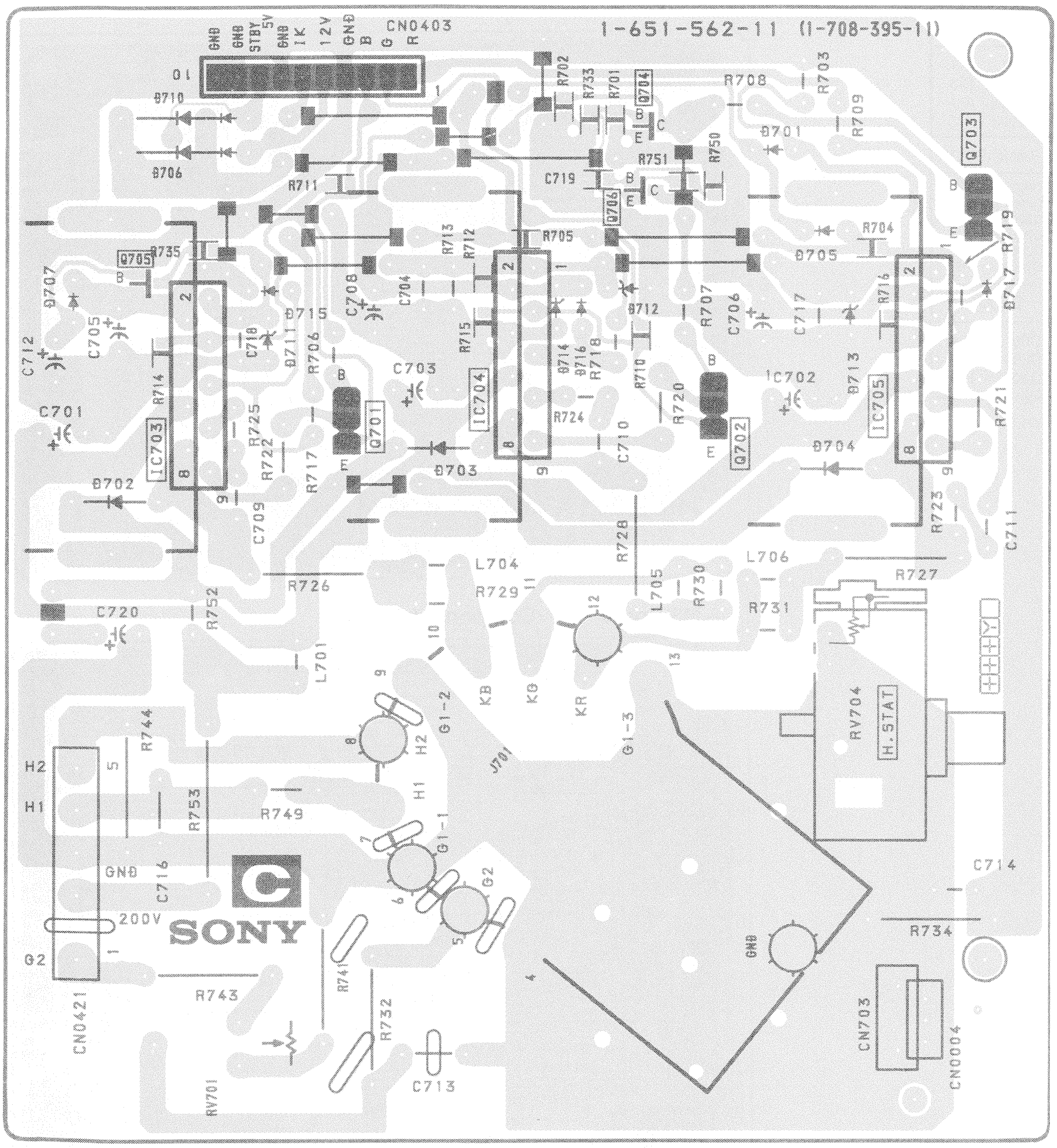
CAUTION
Be sure to connect the connector CN0004 for safety

C (VIÐEO OUT, G2 REG)

B-SS4873<AEP>-C..

C [VIDEO OUT, G2 REG]

— C Board —



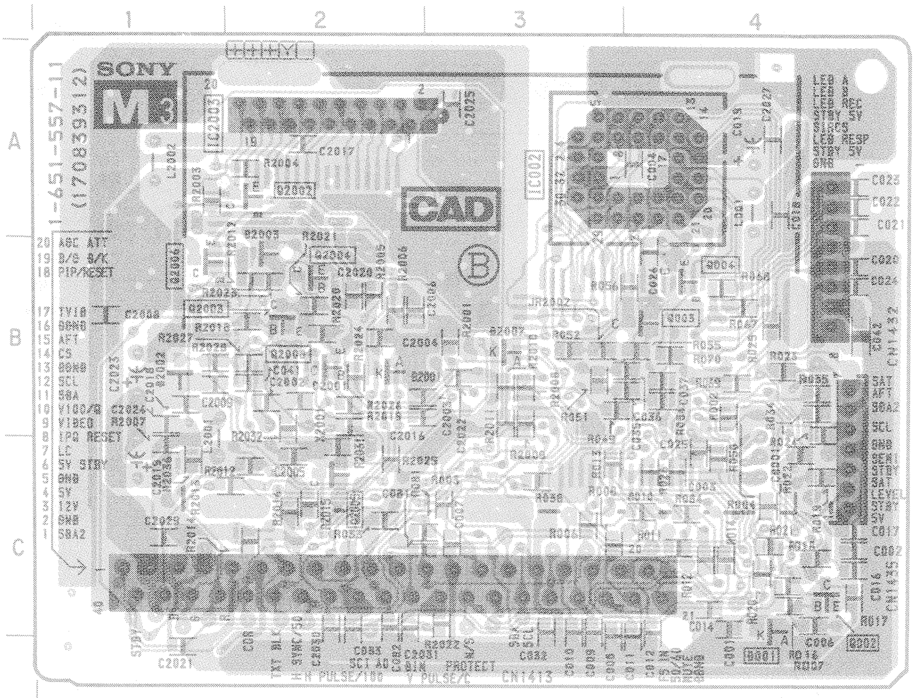
CN0403
GND
GND
STBY 5V
GND
IK
12V
GND
B
G
R
1-651-562-11 (1-708-395-11)
01
D710
D706
R711
R702
R733
R701
Q704
R708
R703
R709
D701
Q703
R750
R751
C719
Q706
R705
R713
R712
R735
Q705
D707
C705
C712
C701
D702
IC703
R714
R725
R722
C718
D711
D715
R706
C708
C704
C703
Q701
R717
D703
C709
IC704
R715
D714
D716
R718
R724
D712
R710
R720
C710
R707
C706
Q702
C717
IC702
D713
R716
R704
D705
D719
D717
IC705
R721
D704
R723
C711
R726
R752
C720
L704
R729
L701
R728
L705
R730
L706
R727
R731
KB
KG
KR
G1-2
G1-3
G1-1
G2
H1
H2
J701
RV704
H.STAT
R744
R753
R749
C716
H2
H1
GND
200V
G2
CN0421
R743
R741
R732
RV701
C713
GND
C714
R734
CN703
CN0004
SONY
C

M3 [MICRO COMPUTER, MEGATEXT, D-RAM, ROM]

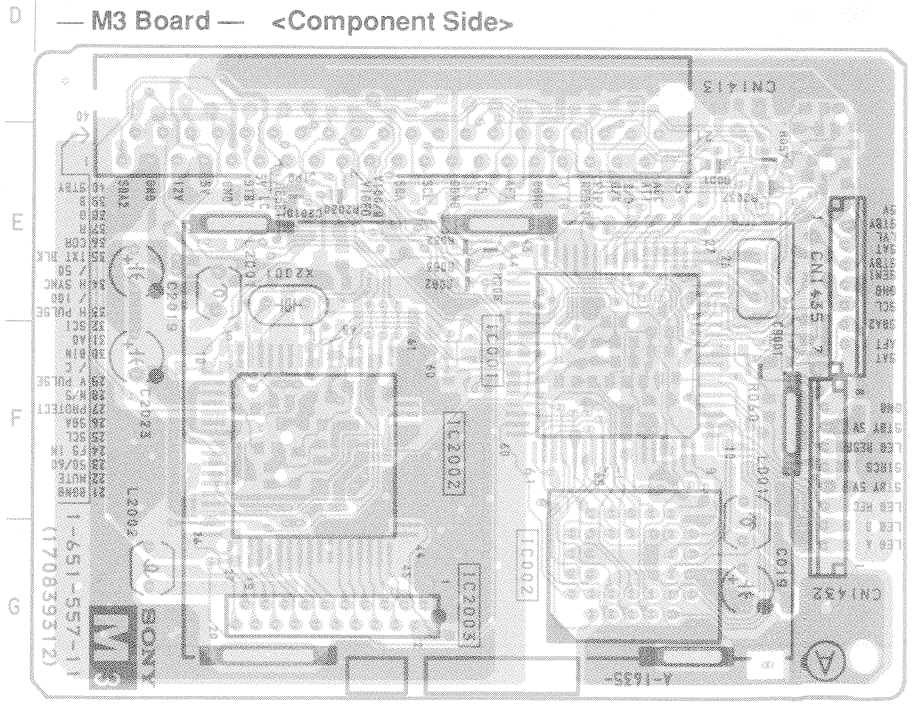
— M3 Board —

IC	
IC001	F-3
IC002	G-3
IC2002	A-3
IC2003	A-2
TRANSISTOR	
Q002	C-4
Q2002	A-2
Q2004	B-2
Q2005	C-2
Q2006	B-1
Q2008	B-2
DIODE	
D001	D-4
D2001	B-2
D2007	B-3

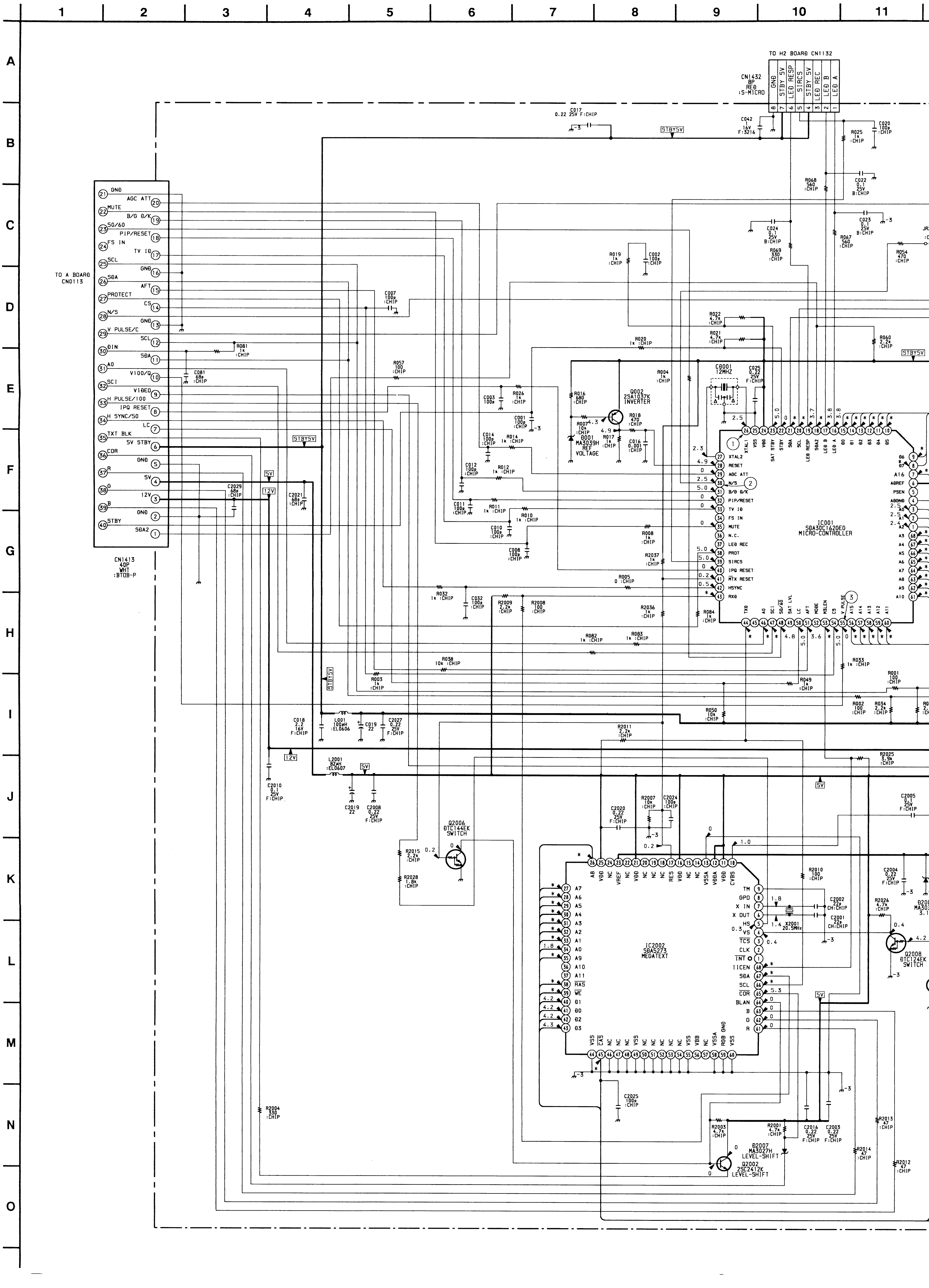
— M3 Board — <Conductor Side>

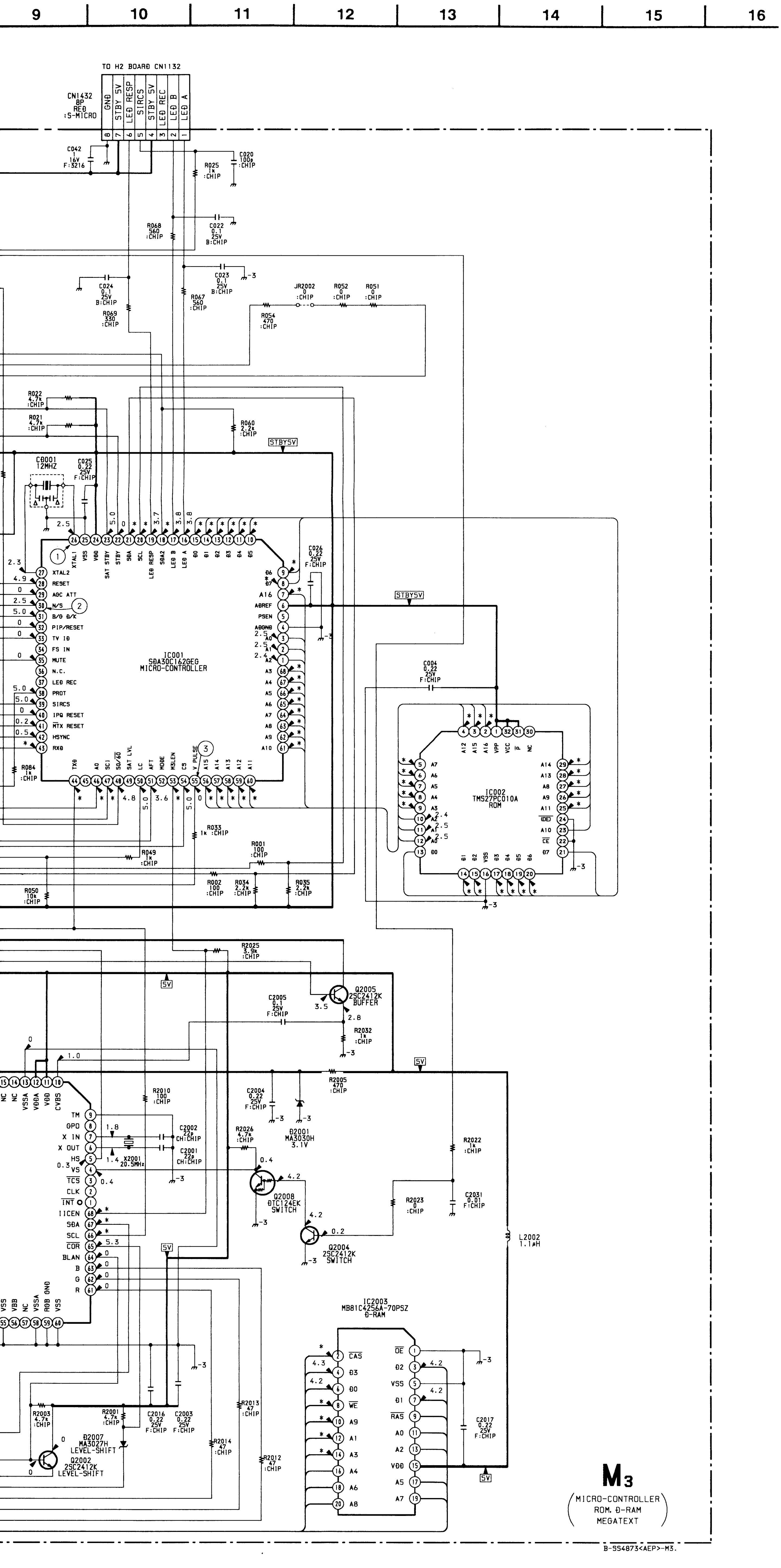

1
2
3
4
A
B
C
SONY
M3
1-651-557-11
(1708393 12)
CAD
B
IC2003
IC002
CN1432
CN1435
CN1413
20 AGC ATT
19 B/G B/K
18 PIP/RESET
17 TV10
16 GND
15 AFT
14 CS
13 GND
12 SCL
11 SDA
10 V100/G
9 VIDEO
8 IPQ RESET
7 LC
6 5V STBY
5 GND
4 5V
3 12V
2 GND
1 SDA2
LED A
LED B
LED REC
STBY 5V
SIRCS
LED RESP
STBY 5V
GND
SAT
AFT
SDA2
SCL
GND
SEMI
STBY
SAT
LEVEL
STBY
5V

— M3 Board — <Component Side>

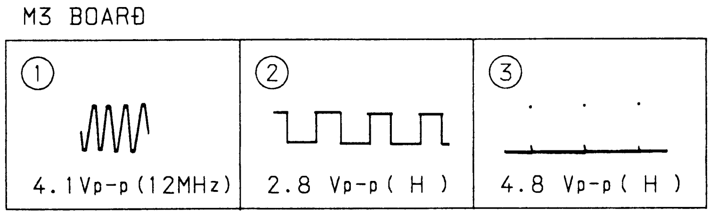

D
E
F
G
SONY
M3
1-651-557-11
(1708393 12)
CN1413
CN1432
CN1435
IC001
IC2002
IC2003
IC002
X2001
L2001
L2002
C2019
C2023
C019
A
A-1635-

- ▨ : Pattern from the side which enables seeing.
- ▒ : Pattern of the rear side.

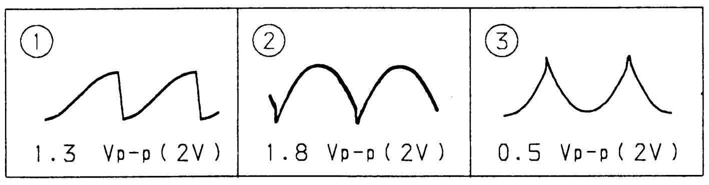

1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
TO H2 BOARD CN1132
CN1432 8P RED :S-MICRO
GND
STBY 5V
LED RESP
SIRCS
STBY 5V
LED REC
LED B
LED A
TO A BOARD CN0113
CN1413 40P WHT :BTOB-P
GND
AGC ATT
MUTE
B/G D/K
50/60
PIP/RESET
FS IN
TV ID
SCL
GND
SDA
AFT
PROTECT
CS
N/S
GND
V PULSE/C
SCL
DIN
SDA
A0
V100/Q
SCI
VIDEO
H PULSE/100
IPQ RESET
H SYNC/50
LC
TXT BLK
5V STBY
COR
GND
R
5V
G
12V
B
GND
STBY
SDA2
STBY5V
5V
12V
C017 0.22 25V F:CHIP
C042 1 16V F:3216
R025 1k :CHIP
C020 100p :CHIP
R068 560 :CHIP
C022 0.1 25V B:CHIP
C023 0.1 25V B:CHIP
C024 0.1 25V B:CHIP
R069 330 :CHIP
R067 560 :CHIP
R054 470 :CHIP
R019 1k :CHIP
C002 100p :CHIP
C007 100p :CHIP
R022 4.7k :CHIP
R021 4.7k :CHIP
R020 1k :CHIP
R060 2.2k :CHIP
R081 1k :CHIP
C081 68p :CHIP
R057 100 :CHIP
R004 1k :CHIP
CB001 12MHZ
C025 0.22 25V F:CHIP
R016 680 :CHIP
Q002 2SA1037K INVERTER
R018 470 :CHIP
R007 10k :CHIP
D001 MA3039H REF VOLTAGE
R017 1k :CHIP
C016 0.001 :CHIP
C003 100p
R026 1k :CHIP
C001 100p :CHIP
C014 100p :CHIP
R014 1k :CHIP
C012 100p :CHIP
R012 1k :CHIP
C011 100p :CHIP
R011 1k :CHIP
C010 100p :CHIP
R010 1k :CHIP
C008 100p :CHIP
R008 1k :CHIP
R2037 1k :CHIP
C2029 68p :CHIP
C2021 68p :CHIP
IC001 SDA30C162GEG MICRO-CONTROLLER
XTAL1
VSS
VDD
SAT STBY
STBY
SDA
SCL
LED RESP
LED B
LED A
D0
D1
D2
D3
D4
D5
D6
D7
XTAL2
RESET
AGC ATT
N/S
B/G D/K
PIP/RESET
TV ID
FS IN
MUTE
N.C.
LED REC
PROT
SIRCS
IPQ RESET
MTX RESET
HSYNC
RXD
TXD
A0
SCI
SAT LVL
50/60
LC
AFT
MODE
M3LEN
CS
V PULSE
A15
A14
A13
A12
A11
A16
ABREF
PSEN
ABGND
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
R005 0 :CHIP
R032 1k :CHIP
C032 100p :CHIP
R2009 2.2k :CHIP
R2008 100 :CHIP
R2036 1k :CHIP
R084 1k :CHIP
R082 1k :CHIP
R083 1k :CHIP
R038 10k :CHIP
R033 1k :CHIP
R003 1k :CHIP
R049 1k :CHIP
R001 100 :CHIP
R002 100 :CHIP
R034 2.2k :CHIP
R050 10k :CHIP
C018 2.2 16V F:CHIP
L001 100μH :EL0606
C019 22
C2027 0.22 25V F:CHIP
R2011 2.2k :CHIP
R2025 3.9k :CHIP
L2001 82μH :EL0607
C2010 0.1 25V F:CHIP
C2019 22
C2008 0.22 25V F:CHIP
C2005 0.1 25V F:CHIP
Q2006 DTC144EK SWITCH
R2015 2.2k :CHIP
R2028 1.8k :CHIP
C2020 0.22 25V F:CHIP
R2007 10k :CHIP
C2024 100p :CHIP
IC2002 SDA5273 MEGATEXT
A8
VDD
NC
VREF
RES
VSSA
VDDA
CVBS
TM
GPO
X IN
X OUT
HS
VS
TCS
CLK
INT
IICEN
SDA
SCL
COR
BLAN
B
G
R
A7
A6
A5
A4
A3
A2
A1
A0
A9
A10
A11
RAS
WE
D1
D0
D2
D3
VSS
CAS
VBB
RGB GND
R2010 100 :CHIP
C2002 22p :CHIP
C2001 22p :CHIP
X2001 20.5MHz
C2004 0.22 25V F:CHIP
R2026 4.7k :CHIP
Q2008 DTC124EK SWITCH
C2025 100p :CHIP
R2003 4.7k :CHIP
R2001 4.7k :CHIP
D2007 MA3027H LEVEL-SHIFT
Q2002 2SC2412K LEVEL-SHIFT
C2016 0.22 25V F:CHIP
C2003 0.22 25V F:CHIP
R2013 47 :CHIP
R2014 47 :CHIP
R2012 47 :CHIP
R2004 330 :CHIP

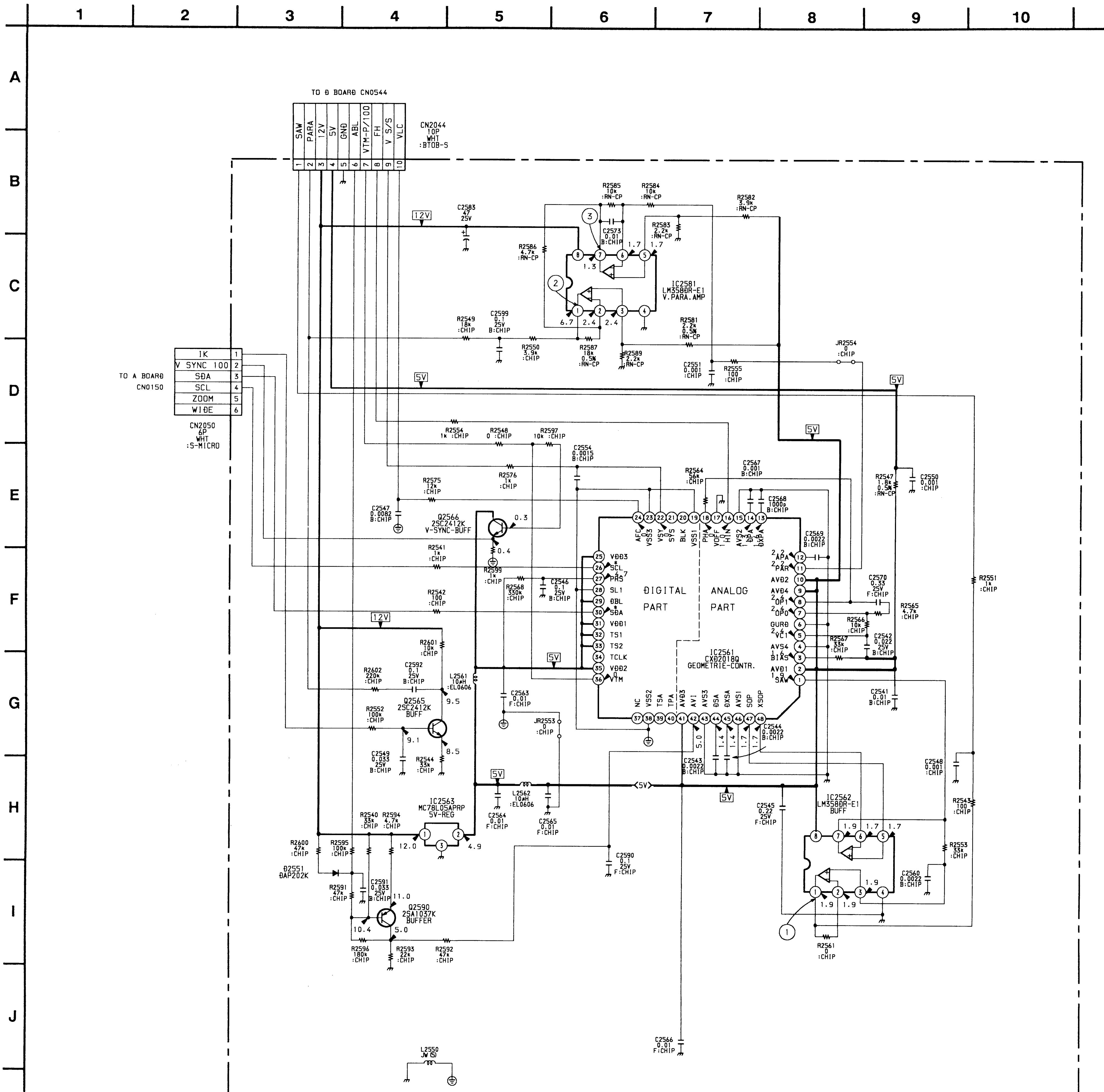

9
10
11
12
13
14
15
16
TO H2 BOARD CN1132
CN1432 8P RED :S-MICRO
GND
STBY 5V
LED RESP
SIRCS
STBY 5V
LED REC
LED B
LED A
C042 1 16V F:5216
R025 1k :CHIP
C020 100p :CHIP
R068 560 :CHIP
C022 0.1 25V B:CHIP
C024 0.1 25V B:CHIP
R069 330 :CHIP
C023 0.1 25V B:CHIP
R067 560 :CHIP
JR2002 0 :CHIP
R052 0 :CHIP
R051 0 :CHIP
R054 470 :CHIP
R022 4.7k :CHIP
R021 4.7k :CHIP
R060 2.2k :CHIP
STBY5V
CB001 12MHZ
C025 0.22 25V F:CHIP
C026 0.22 25V F:CHIP
IC001 SDA30C162GEG MICRO-CONTROLLER
XTAL2
RESET
AGC ATT
N/S
B/D O/K
PIP/RESET
TV ID
FS IN
MUTE
N.C.
LED REC
PROT
SIRCS
IPQ RESET
MTX RESET
HSYNC
RXD
AREF
PSEN
AGND
R084 1k :CHIP
R033 1k :CHIP
R049 1k :CHIP
R001 100 :CHIP
R002 100 :CHIP
R034 2.2k :CHIP
R035 2.2k :CHIP
R050 10k :CHIP
C004 0.22 25V F:CHIP
IC002 TMS27PC010A ROM
R2025 3.9k :CHIP
Q2005 2SC2412K BUFFER
C2005 0.1 25V F:CHIP
R2032 1k :CHIP
5V
R2005 470 :CHIP
R2010 100 :CHIP
C2004 0.22 25V F:CHIP
D2001 MA3030H 3.1V
C2002 22p CH:CHIP
C2001 22p CH:CHIP
X2001 20.5MHz
R2026 4.7k :CHIP
Q2008 DTC124EK SWITCH
Q2004 2SC2412K SWITCH
R2022 1k :CHIP
R2023 0 :CHIP
C2031 0.01 F:CHIP
L2002 1.1µH
IC2003 MB81C4256A-70PSZ D-RAM
C2017 0.22 25V F:CHIP
R2003 4.7k :CHIP
R2001 4.7k :CHIP
D2007 MA3027H LEVEL-SHIFT
Q2002 2SC2412K LEVEL-SHIFT
C2016 0.22 25V F:CHIP
C2003 0.22 25V F:CHIP
R2013 47 :CHIP
R2014 47 :CHIP
R2012 47 :CHIP
M3
(MICRO-CONTROLLER ROM, D-RAM MEGATEXT)
B-SS4873<AEP>-M3.

M3 BOARD


①
4.1Vp-p (12MHz)
②
2.8 Vp-p (H)
③
4.8 Vp-p (H)

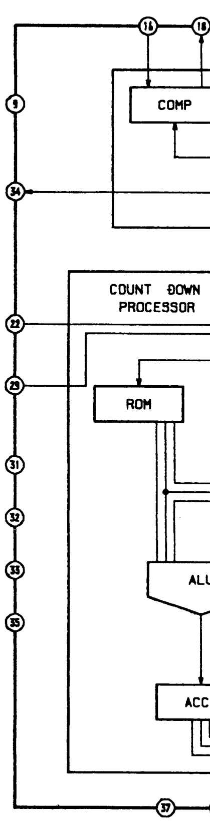
— D6 Board —



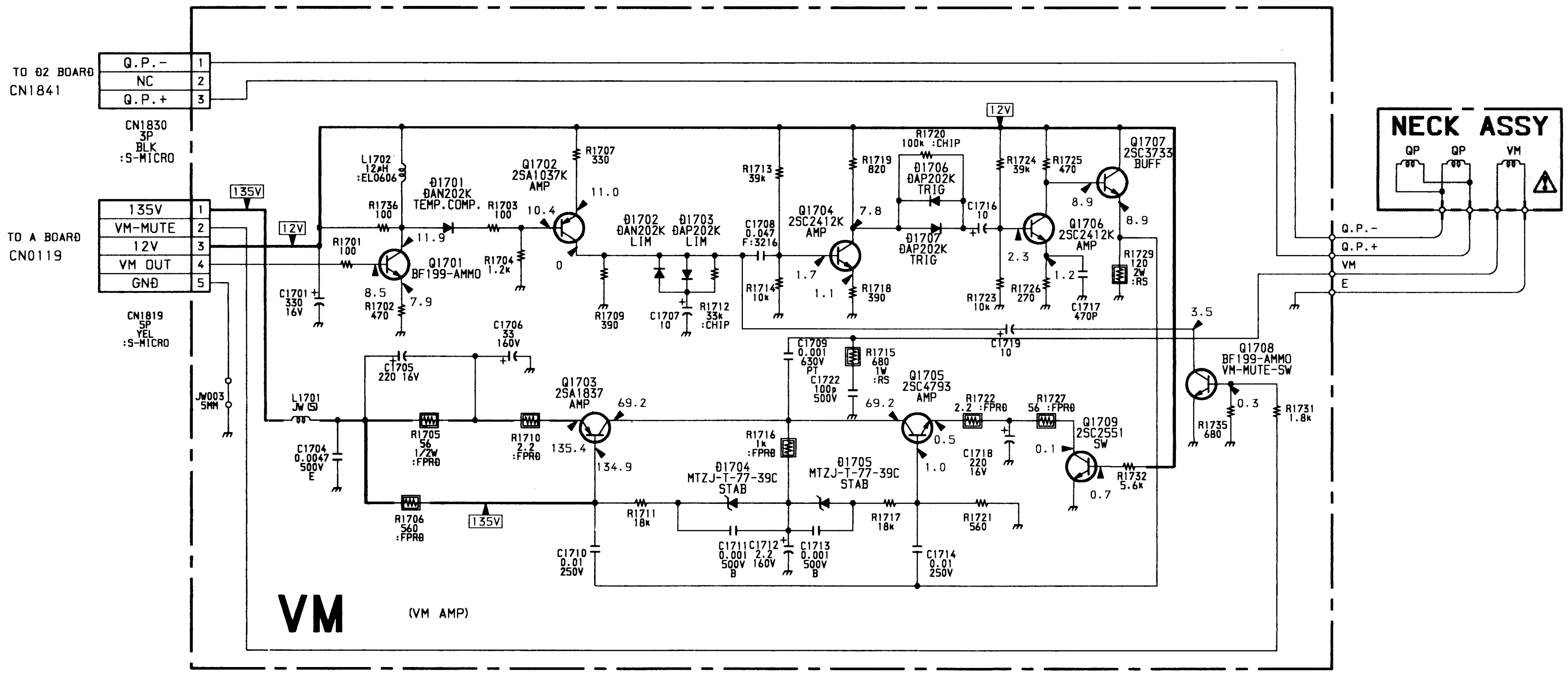

1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
I
J
K
TO B BOARD CN0544
SAW
PARA
12V
5V
GND
ABL
VTM-P/100
FH
V S/S
VLC
CN2044
10P
WHT
:BTOB-S
TO A BOARD
CN0150
1K
V SYNC 100
SDA
SCL
ZOOM
WIDE
CN2050
6P
WHT
:S-MICRO
IC2581
LM358DR-E1
V.PARA.AMP
IC2561
CXD2018Q
GEOMETRIE-CONTR.
DIGITAL PART
ANALOG PART
IC2562
LM358DR-E1
BUFF
IC2563
MC78L05APRP
5V-REG
Q2566
2SC2412K
V-SYNC-BUFF
Q2565
2SC2412K
BUFF
Q2590
2SA1037K
BUFFER
D2551
DAP202K
L2561
10μH
:EL0606
L2562
10μH
:EL0606
L2550
JW(5)
JR2554
JR2553
12V
5V
D6 (GEO METRIE CONTROL V.PARA.AMP)

B-S54873<AEP>-06.

D6 BOARD IC2

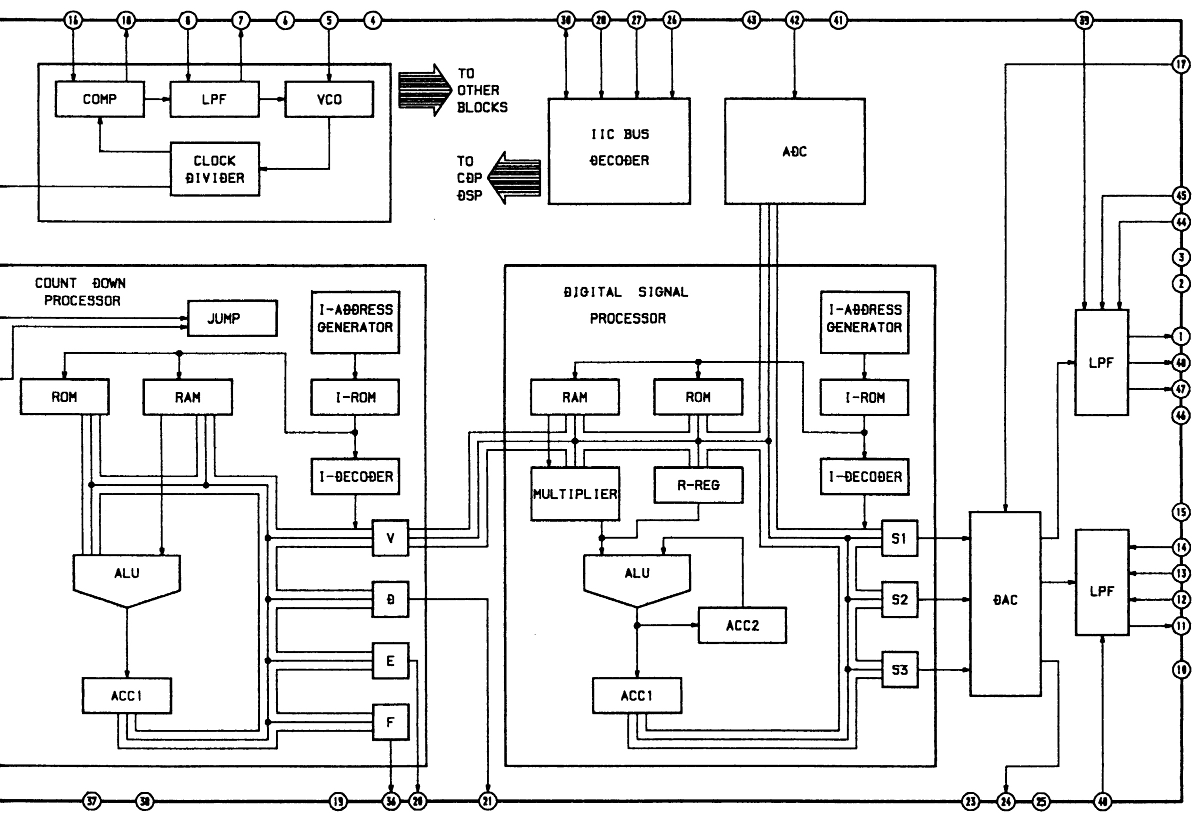

COMP
COUNT DOWN
PROCESSOR
ROM
ALU
ACC

12	13	14	15	16	17	18	19	20	21	22


TO D2 BOARD
CN1841
Q.P.-
NC
Q.P.+
CN1830
3P
BLK
:S-MICRO
TO A BOARD
CN0119
135V
VM-MUTE
12V
VM OUT
GND
CN1819
5P
YEL
:S-MICRO
JW003
5MM
135V
12V
L1702
12μH
:EL0606
D1701
DAN202K
TEMP.COMP.
R1736
100
R1701
100
Q1701
BF199-AMMO
11.9
8.5
7.9
R1702
470
C1701
330
16V
R1703
100
R1704
1.2k
Q1702
2SA1037K
AMP
R1707
330
10.4
11.0
0
D1702
DAN202K
LIM
D1703
DAP202K
LIM
R1709
390
C1707
10
R1712
33k
:CHIP
R1713
39k
C1708
0.047
F:3216
R1714
10k
Q1704
2SC2412K
AMP
1.7
1.1
7.8
R1719
820
R1718
390
R1720
100k :CHIP
D1706
DAP202K
TRIG
D1707
DAP202K
TRIG
C1716
10
12V
R1724
39k
R1725
470
R1723
10k
R1726
270
Q1706
2SC2412K
AMP
2.3
1.2
C1717
470P
Q1707
2SC3733
BUFF
8.9
8.9
R1729
120
2W
:RS
C1719
10
3.5
C1706
33
160V
C1705
220 16V
L1701
JW (5)
C1704
0.0047
500V
E
R1705
56
1/2W
:FPRD
R1710
2.2
:FPRD
Q1703
2SA1837
AMP
69.2
135.4
134.9
R1706
560
:FPRD
135V
R1711
18k
C1710
0.01
250V
C1709
0.001
630V
PT
C1722
100p
500V
R1715
680
1W
:RS
R1716
1k
:FPRD
D1704
MTZJ-T-77-39C
STAB
D1705
MTZJ-T-77-39C
STAB
C1711
0.001
500V
B
C1712
2.2
160V
C1713
0.001
500V
B
Q1705
2SC4793
AMP
69.2
0.5
1.0
R1717
18k
R1721
560
C1714
0.01
250V
R1722
2.2 :FPRD
R1727
56 :FPRD
C1718
220
16V
Q1709
2SC2551
SW
0.1
0.7
R1732
5.6k
Q1708
BF199-AMMO
VM-MUTE-SW
0.3
R1735
680
R1731
1.8k
Q.P.-
Q.P.+
VM
E
NECK ASSY
QP
QP
VM
⚠
VM
(VM AMP)

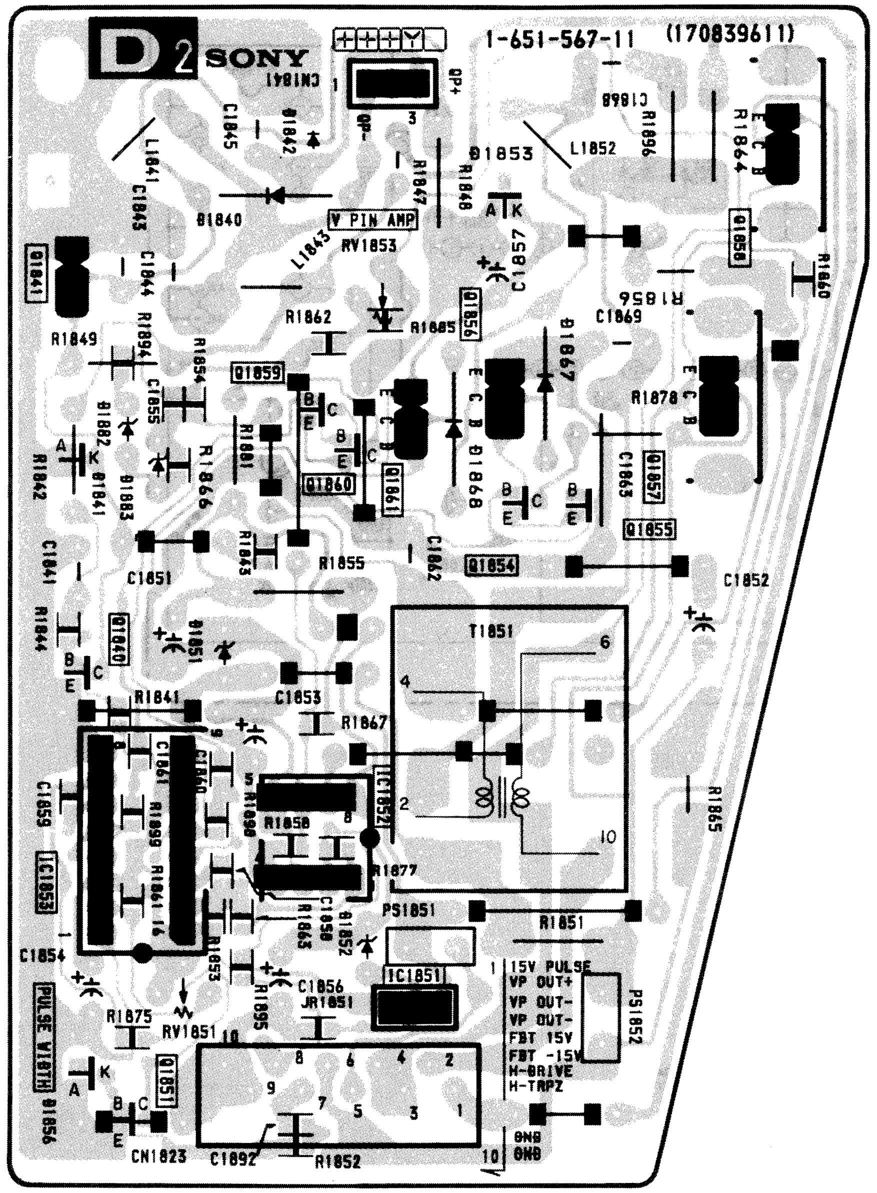
B-SS4873<AEP>-VM.

OARD IC2561 CXD2018Q

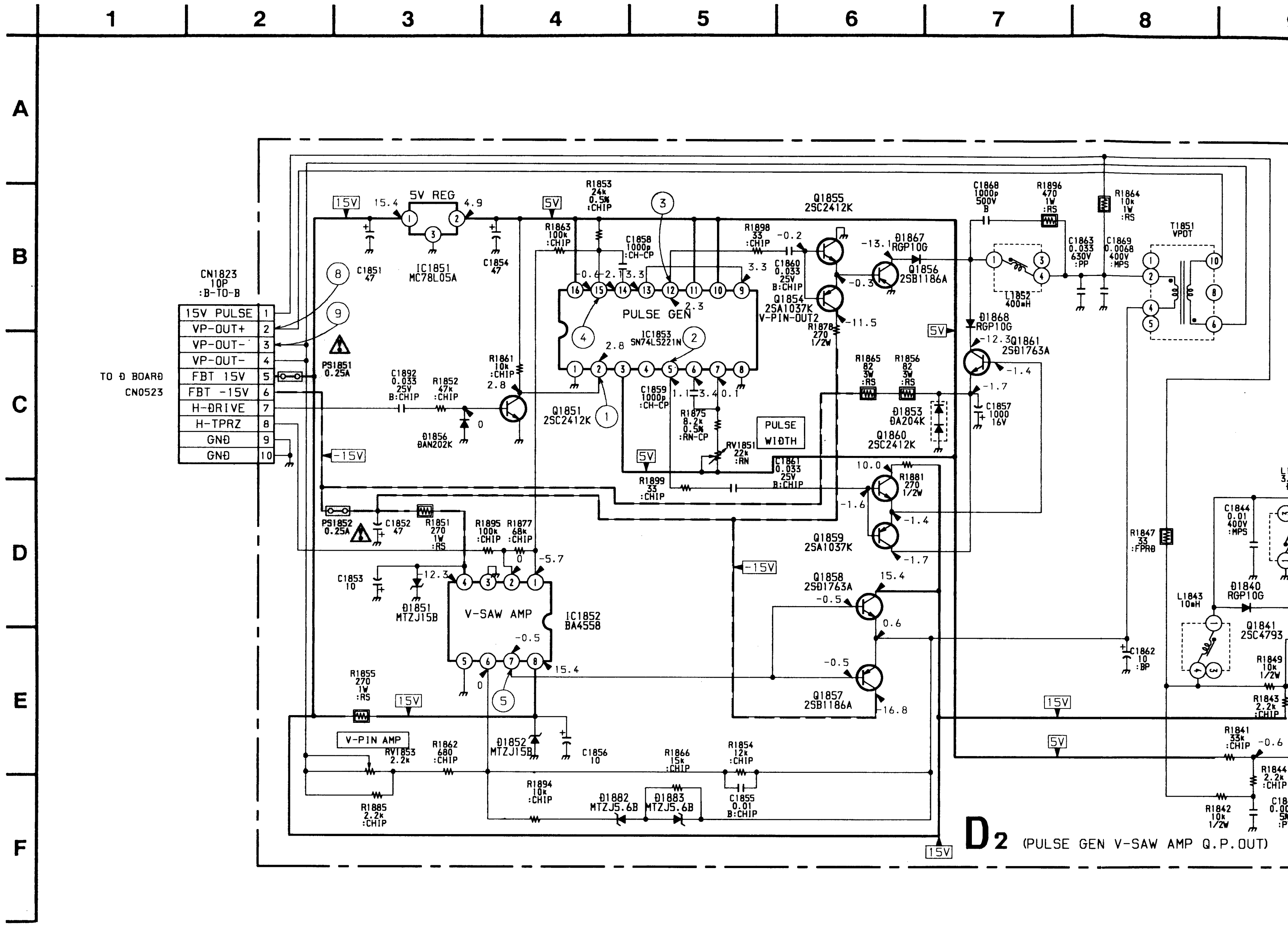

16
18
8
7
6
5
4
COMP
LPF
VCO
CLOCK
DIVIDER
TO
OTHER
BLOCKS
TO
CDP
DSP
30
29
27
26
IIC BUS
DECODER
43
42
41
ADC
39
17
45
44
3
2
COUNT DOWN
PROCESSOR
JUMP
I-ADDRESS
GENERATOR
ROM
RAM
I-ROM
I-DECODER
ALU
ACC1
V
D
E
F
DIGITAL SIGNAL
PROCESSOR
I-ADDRESS
GENERATOR
RAM
ROM
I-ROM
MULTIPLIER
R-REG
I-DECODER
ALU
ACC2
ACC1
S1
S2
S3
DAC
LPF
LPF
1
48
47
46
15
14
13
12
11
10
37
38
19
34
20
21
23
24
25
40

D2 [Q.P DRIVE, Q.P. OUT, V PIN DRIVE, V-PIN OUT]

— D2 Board —

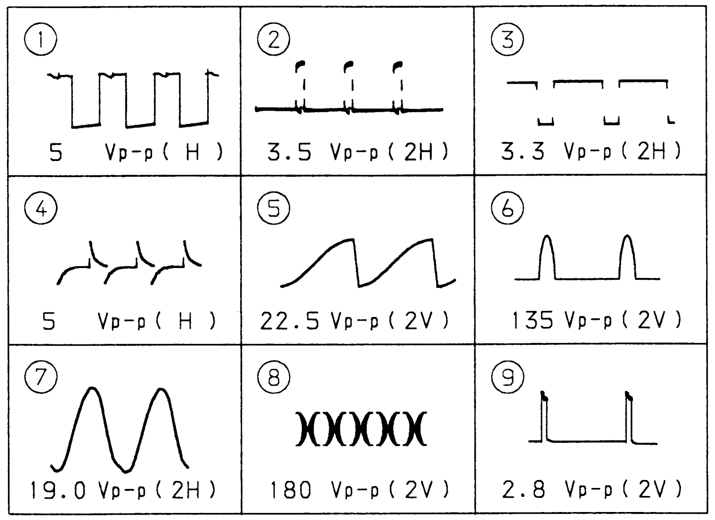


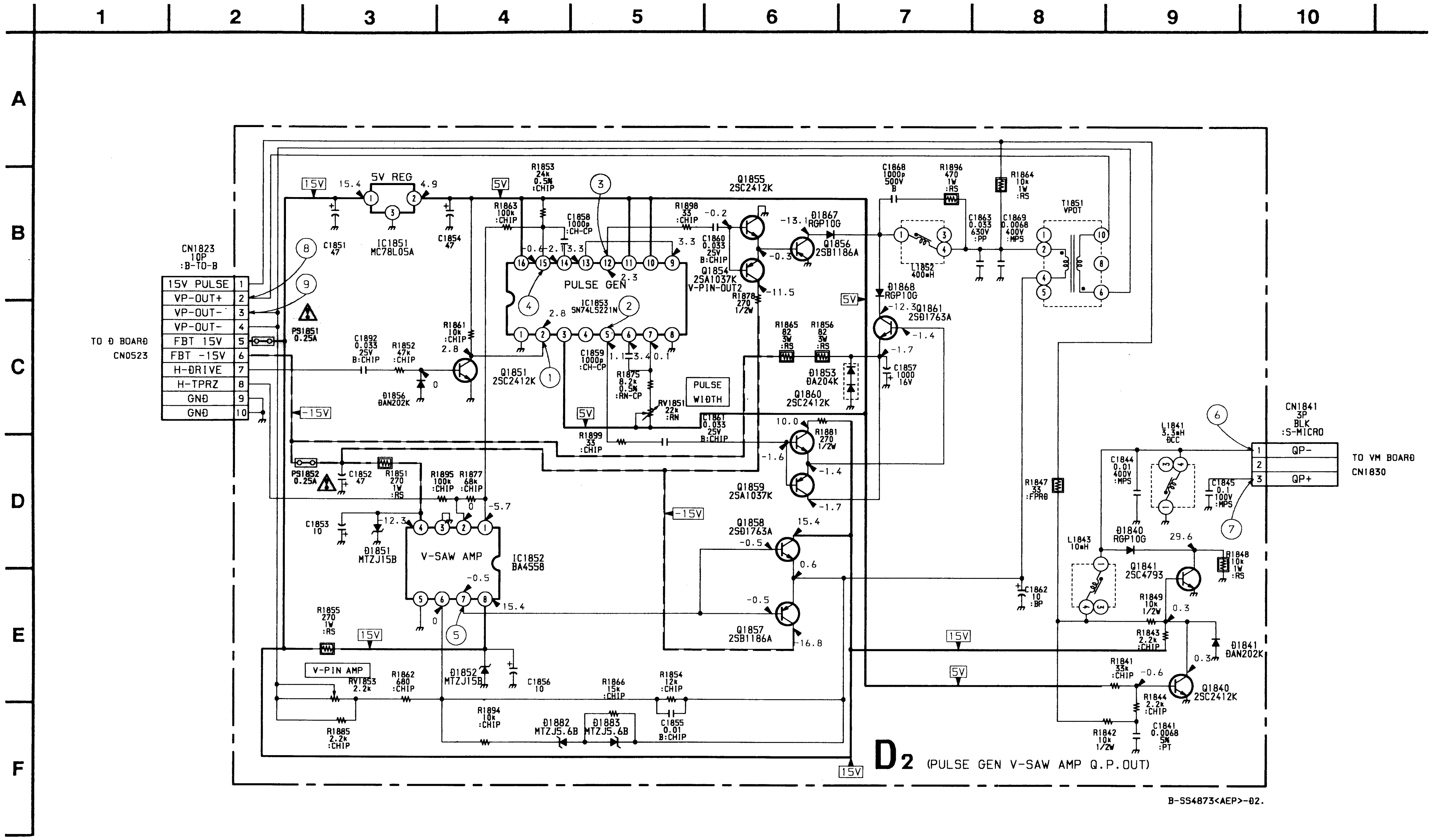
D2 SONY
1-651-567-11 (170839611)
CN1841
QP+
QP-
C1845
Q1842
L1841
C1843
C1844
Q1840
Q1853
L1852
C1868
R1896
R1864
V PIN AMP
RV1853
L1843
C1857
Q1858
R1860
Q1841
R1849
R1894
C1855
R1854
R1862
R1865
Q1856
Q1867
C1869
R1856
Q1859
R1881
R1866
Q1860
Q1861
Q1868
R1878
C1863
Q1857
Q1855
Q1854
R1842
Q1882
Q1883
R1841
C1841
R1844
Q1840
C1851
R1843
R1855
C1862
C1852
C1853
R1867
T1851
IC1852
R1858
R1877
R1899
R1861
C1859
R1875
RV1851
PULSE WIDTH
Q1856
C1854
IC1853
PS1851
R1851
R1863
R1853
R1895
C1858
C1856
JR1851
IC1851
Q1851
CN1823
C1892
R1852
15V PULSE
VP OUT+
VP OUT-
VP OUT-
FBT 15V
FBT -15V
H-DRIVE
H-TRPZ
GND
GND
PS1852
R1865



1
2
3
4
5
6
7
8
A
B
C
D
E
F
5V REG
IC1851 MC78L05A
15V
5V
15.4
4.9
C1851 47
C1854 47
R1853 24k 0.5W :CHIP
R1863 100k :CHIP
C1858 1000p :CH-CP
PULSE GEN
IC1853 SN74LS221N
Q1855 2SC2412K
Q1854 2SA1037K V-PIN-OUT2
R1898 33 :CHIP
C1860 0.033 25V B:CHIP
D1867 RGP10G
Q1856 2SB1186A
C1868 1000p 500V B
R1896 470 1W :RS
R1864 10k 1W :RS
C1863 0.033 630V :PP
C1869 0.0068 400V :MPS
T1851 VPOT
L1852 400mH
CN1823 10P :B-TO-B
15V PULSE
VP-OUT+
VP-OUT-
VP-OUT-
FBT 15V
FBT -15V
H-DRIVE
H-TPRZ
GND
GND
TO D BOARD CN0523
PS1851 0.25A
C1892 0.033 25V B:CHIP
R1852 47k :CHIP
R1861 10k :CHIP
Q1851 2SC2412K
D1856 BAN202K
C1859 1000p :CH-CP
R1875 8.2k 0.5W :RN-CP
RV1851 22k :RN
PULSE WIDTH
C1861 0.033 25V B:CHIP
R1899 33 :CHIP
R1865 82 3W :RS
R1856 82 3W :RS
D1868 RGP10G
Q1861 2SD1763A
C1857 1000 16V
D1853 DAZ04K
Q1860 2SC2412K
R1881 270 1/2W
R1878 270 1/2W
Q1859 2SA1037K
-15V
PS1852 0.25A
C1852 47
R1851 270 1W :RS
R1895 100k :CHIP
R1877 68k :CHIP
C1853 10
D1851 MTZJ15B
V-SAW AMP
IC1852 BA4558
Q1858 2SD1763A
Q1857 2SB1186A
R1855 270 1W :RS
V-PIN AMP
RV1853 2.2k
R1862 680 :CHIP
D1852 MTZJ15B
C1856 10
R1866 15k :CHIP
R1854 12k :CHIP
R1894 10k :CHIP
D1882 MTZJ5.6B
D1883 MTZJ5.6B
C1855 0.01 B:CHIP
R1885 2.2k :CHIP
D2 (PULSE GEN V-SAW AMP Q.P.OUT)
C1844 0.01 400V :MPS
R1847 33 :FPRB
L1843 10mH
D1840 RGP10G
Q1841 2SC4793
R1849 10k 1/2W
R1843 2.2k :CHIP
C1862 10 :BP
R1841 33k :CHIP
R1844 2.2k :CHIP
R1842 10k 1/2W
-0.2
-13.1
-0.3
-11.5
3.3
2.3
2.8
-12.3
-1.4
-1.7
10.0
-1.6
-1.4
-1.7
15.4
-0.5
0.6
-0.5
-16.8
-12.3
-5.7
-0.5
15.4
-0.6

— D2 Board —

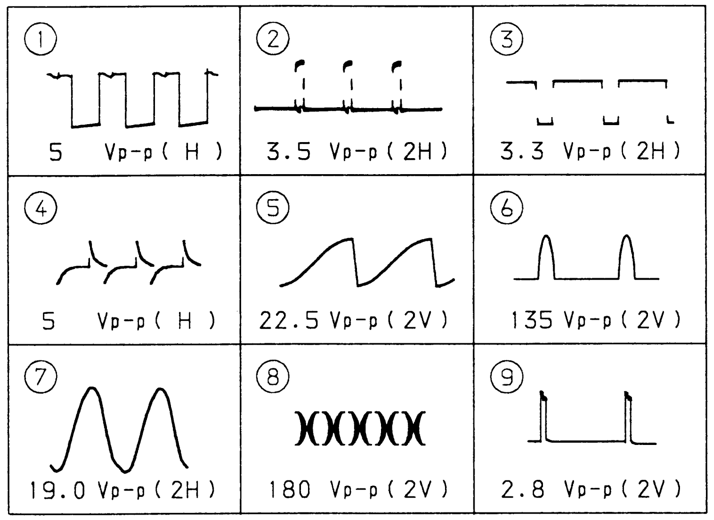



1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
CN1823 10P :B-TO-B
15V PULSE
VP-OUT+
VP-OUT-
VP-OUT-
FBT 15V
FBT -15V
H-DRIVE
H-TPRZ
GND
GND
TO D BOARD CN0523
5V REG
IC1851 MC78L05A
PULSE GEN
IC1853 SN74LS221N
PULSE WIDTH
V-SAW AMP
IC1852 BA4558
V-PIN AMP
Q1855 2SC2412K
Q1856 2SB1186A
Q1854 2SA1037K V-PIN-OUT2
Q1851 2SC2412K
Q1861 2SD1763A
Q1860 2SC2412K
Q1859 2SA1037K
Q1858 2SD1763A
Q1857 2SB1186A
Q1841 2SC4793
Q1840 2SC2412K
T1851 VPOT
L1852 400mH
L1841 3.3mH
L1843 10mH
CN1841 3P BLK :S-MICRO
QP-
QP+
TO VM BOARD CN1830
D2 (PULSE GEN V-SAW AMP Q.P.OUT)
B-SS4873<AEP>-02.

— D2 Board —

Ref. No.	Name	Function
IC1851	MC78L05A	5V REG
IC1852	BA4558	
IC1853	SN74LS221N	
Q1840	2SC2412K	Q.P. DRIVE
Q1841	2SC4793	Q.P. OUT
Q1851	2SC2412K	INVERTER
Q1854	2SA1037K	V PIN DRIVE 2
Q1855	2SC2412K	V PIN DRIVE 1
Q1856	2SB1186A	V PIN OUT 2
Q1857	2SB1186A	VCC OUT 2
Q1858	2SD1763A	VCC OUT 1
Q1859	2SA1037K	V PIN DRIVE 3
Q1860	2SC2412K	V PIN DRIVE 4
Q1861	2SD1763	V PIN OUT 1
D1840	RGP10G	SWITCH
D1841	DAN202K	PROTECT
D1851	MTZJ15B	–12V REG
D1852	MTZJ15B	+12V REG
D1853	DA204K	LEVEL SHIFT
D1856	DAN202K	PROTECTOR
D1867	RGP10G	V PIN SWITCH 1
D1868	RGP10G	V PIN SWITCH 2
D1882	MTZJ5.6B	S CORRECTION 1
D1883	MTZJ5.6B	S CORRECTION 2

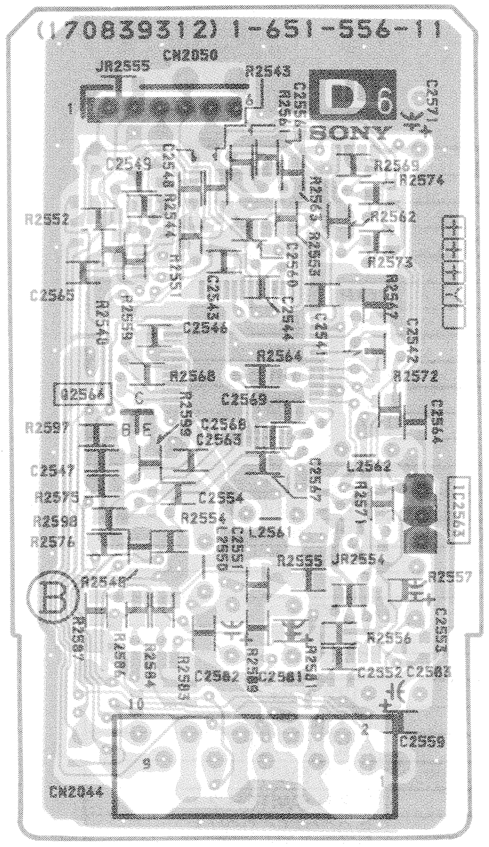
— D2 Board —


①
5 Vp-p (H)
②
3.5 Vp-p (2H)
③
3.3 Vp-p (2H)
④
5 Vp-p (H)
⑤
22.5 Vp-p (2V)
⑥
135 Vp-p (2V)
⑦
19.0 Vp-p (2H)
⑧
180 Vp-p (2V)
⑨
2.8 Vp-p (2V)

D6 [GEOMETRIE CONTROLLER, V PARA AMP, BUFFER]

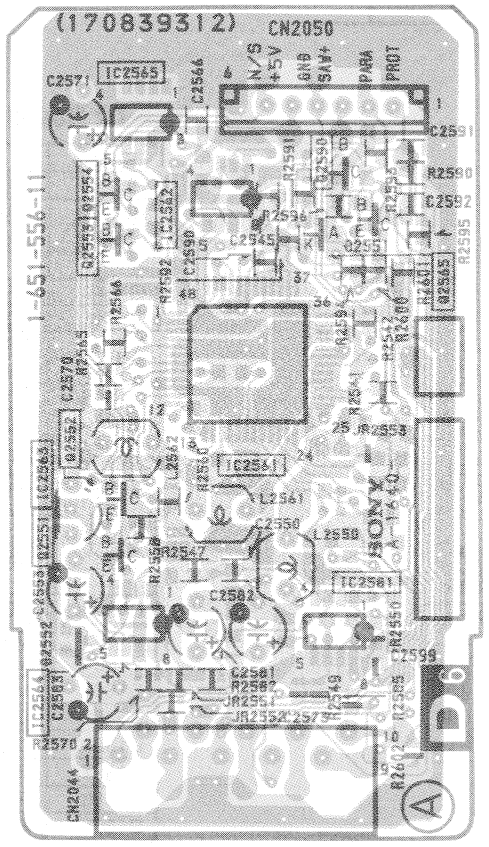
VM [VM AMP]

— D6 Board — <Conductor Side>



(170839312) 1-651-556-11
CN2050
D6
SONY
CN2044
B

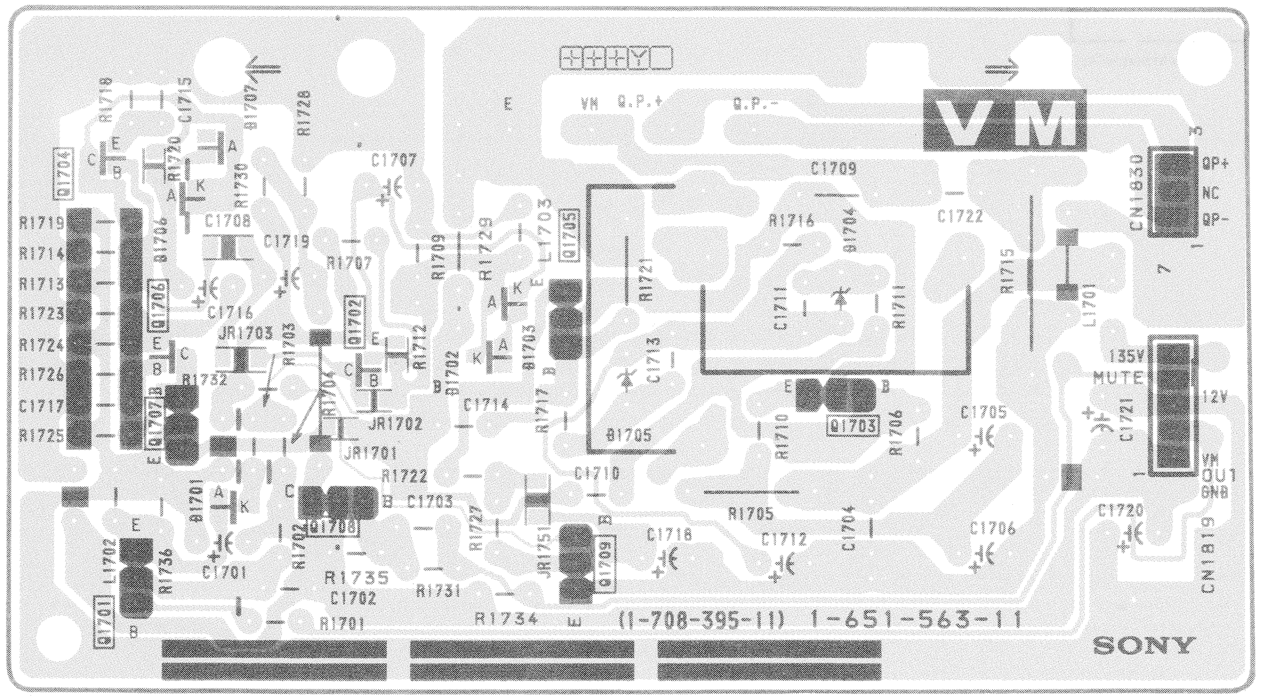
— D6 Board — <Component Side>



(170839312)
CN2050
N/S
+5V
GND
5AV+
PARA
PROT
1-651-556-11
IC2565
IC2561
IC2562
IC2563
IC2564
L2561
L2562
L2550
SONY
D6
CN2044
A

- ▨ : Pattern from the side which enables seeing.
- ▨ : Pattern of the rear side.

— VM Board —

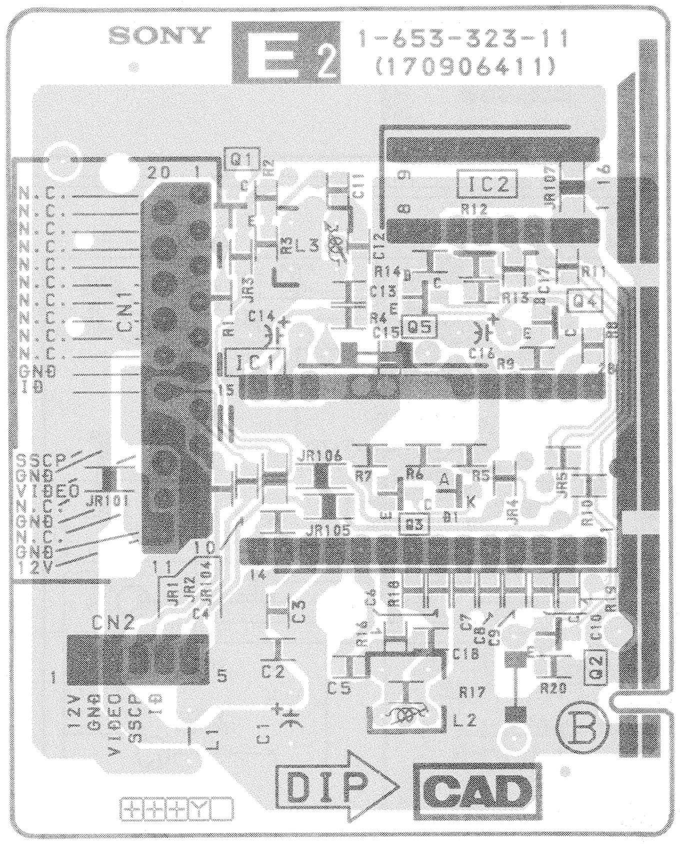


VM
E
VM
Q.P.+
Q.P.-
CN1830
QP+
NC
QP-
135V
MUTE
12V
VM OUT
GND
CN1819
(1-708-395-11) 1-651-563-11
SONY

E2 [SECAM-IDENT]

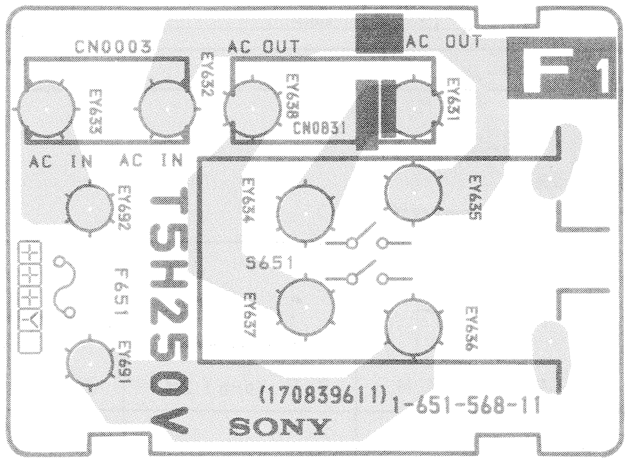
F1 [POWER SWITCH]

— E2 Board —

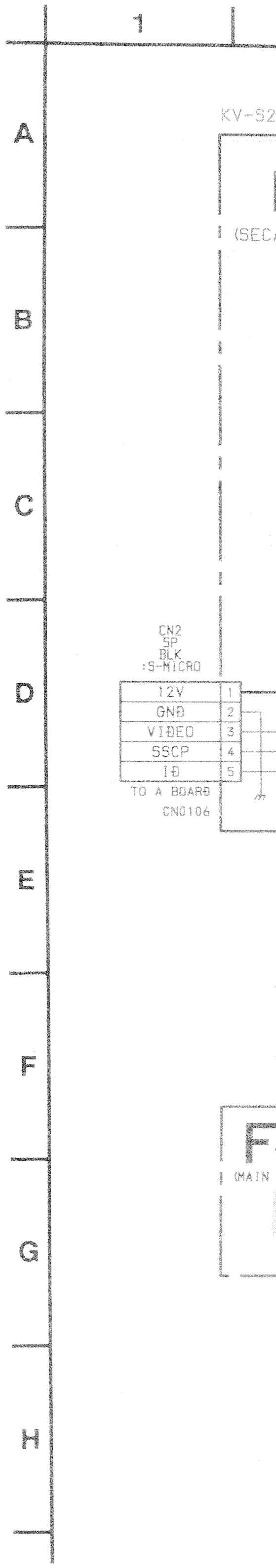


SONY
E2
1-653-323-11
(170906411)
IC1
IC2
CN1
CN2
N.C.
GND
ID
SSCP
VIDEO
12V
DIP
CAD
B

— F1 Board —



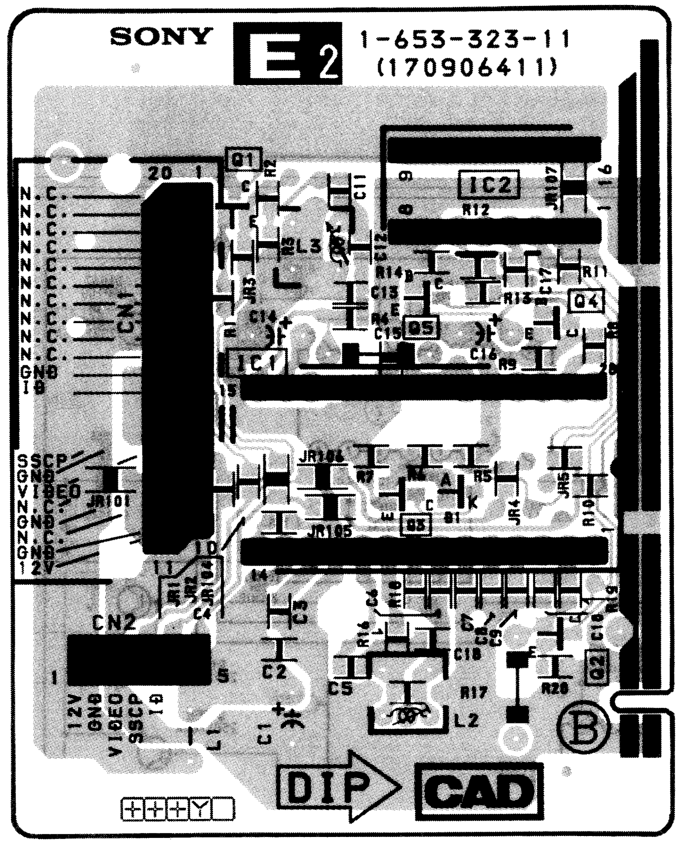
CN0003
AC OUT
AC OUT
F1
AC IN
AC IN
CN0831
S651
F651
T5H250V
(170839611) 1-651-568-11
SONY



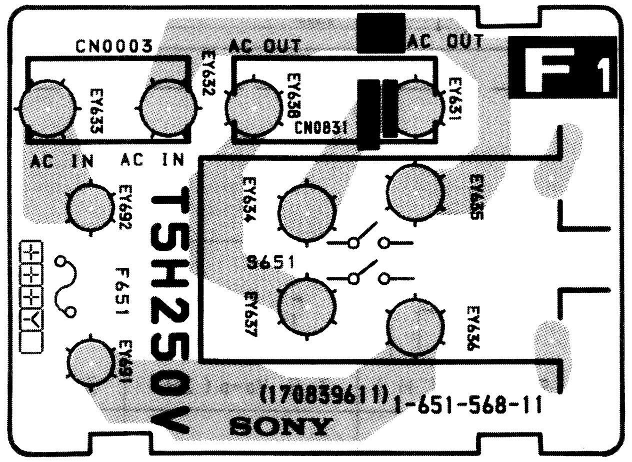
1
A
B
C
D
E
F
G
H
KV-S2
(SECA
CN2
SP
BLK
:S-MICRO
12V
GND
VIDEO
SSCP
ID
TO A BOARD
CN0106
F
(MAIN

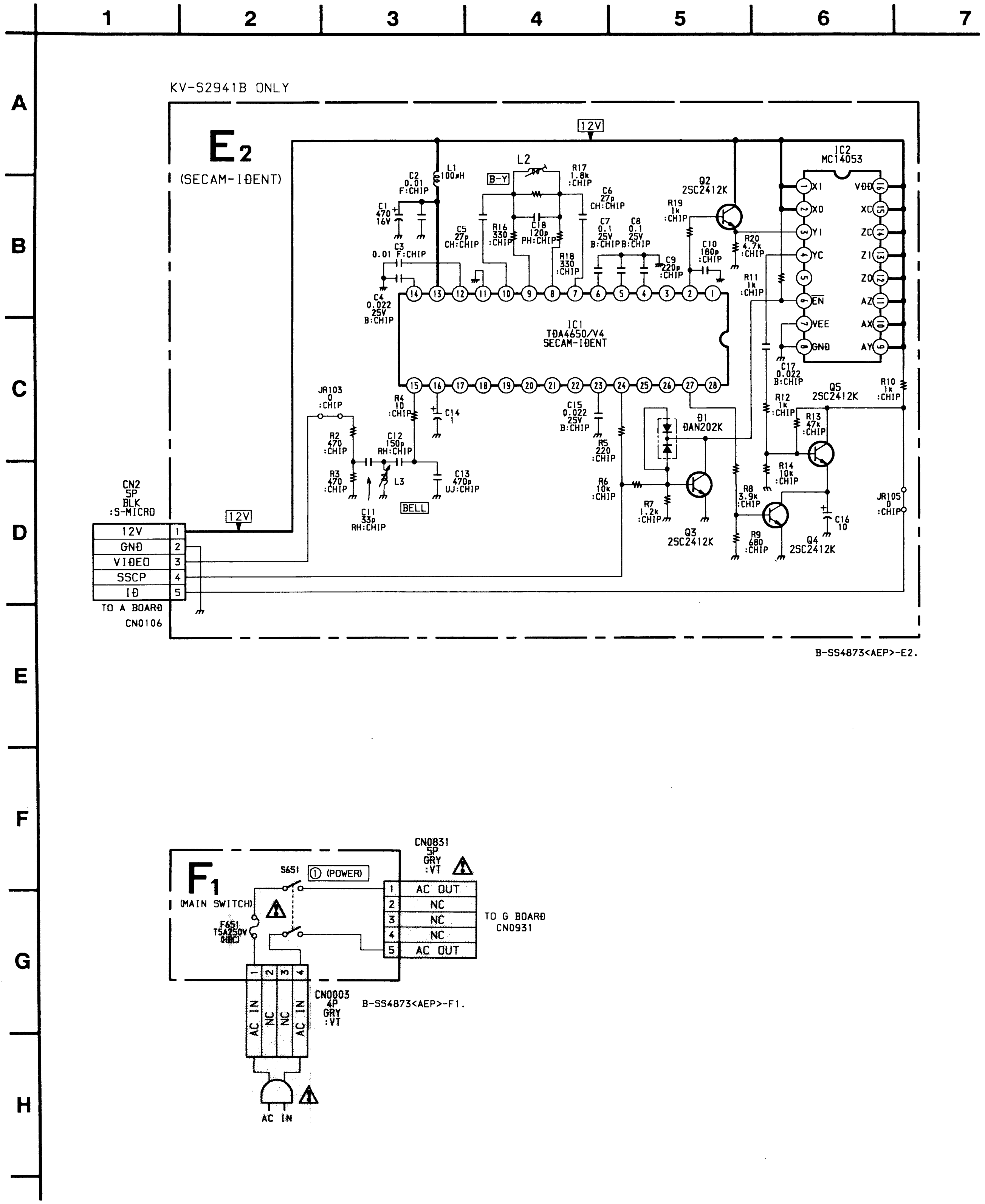
E2 [SECAM-IDENT] F1 [POWER SWITCH]

— E2 Board —


SONY
E2
1-653-323-11
(170906411)
CN1
CN2
IC1
IC2
Q1
Q2
Q3
Q4
Q5
L1
L2
L3
12V
GND
VIDEO
SSCP
ID
DIP
CAD

— F1 Board —


CN0003
AC OUT
AC OUT
CN0831
AC IN
AC IN
S651
F651
T5H250V
(170839611)
1-651-568-11
SONY
F1


KV-S2941B ONLY
E2
(SECAM-IDENT)
12V
IC1
TDA4650/V4
SECAM-IDENT
IC2
MC14053
Q2
2SC2412K
Q3
2SC2412K
Q4
2SC2412K
Q5
2SC2412K
D1
DAN202K
B-Y
BELL
CN2
5P
BLK
:S-MICRO
12V
GND
VIDEO
SSCP
ID
TO A BOARD
CN0106
B-SS4873<AEP>-E2.
F1
(MAIN SWITCH)
S651
(POWER)
F651
T5A250V
CN0831
5P
GRY
:VT
AC OUT
NC
NC
NC
AC OUT
TO G BOARD
CN0931
CN0003
4P
GRY
:VT
AC IN
NC
NC
AC IN
AC IN
B-SS4873<AEP>-F1.

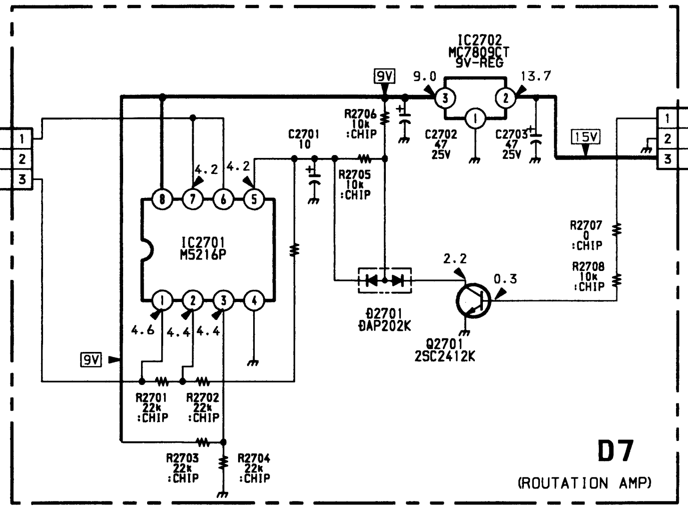
Schematic diagram

← E2 F1 board

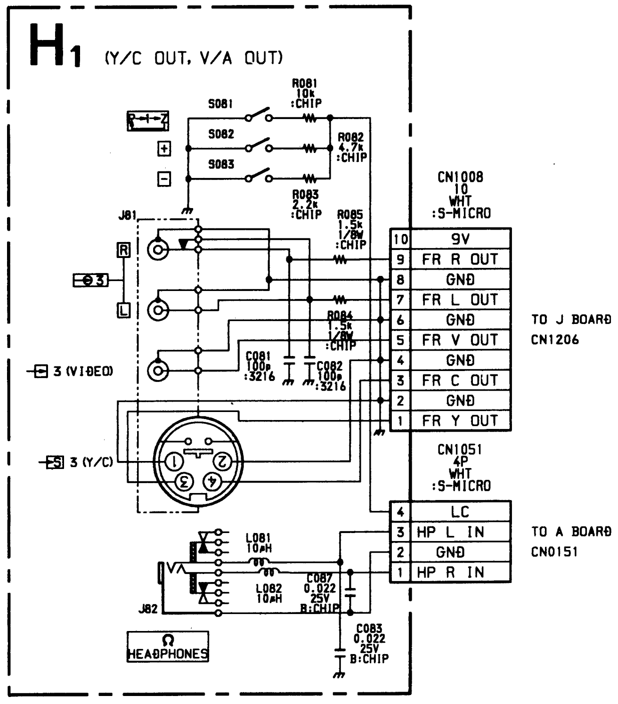
Schematic diagram

D2 board →

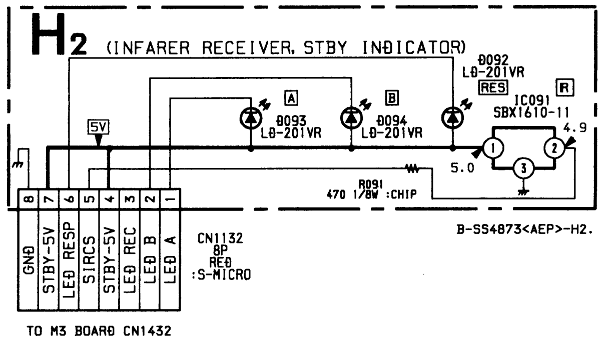
D7 [ROTATION AMP] H1 [AUDIO/VIDEO IN, Y/C IN] H2 [INFRARED RECEIVER, INDICATOR]


CN2701 3P BLK :S-MICRO
ROT (+)
ROT (-)
IC2701 M5216P
IC2702 MC7809CT 9V-REG
9V
9.0
13.7
15V
4.2
4.6
4.4
2.2
0.3
C2701 10
C2702 47 25V
C2703 47 25V
R2706 10k :CHIP
R2705 10k :CHIP
R2707 0 :CHIP
R2708 10k :CHIP
D2701 DAP202K
Q2701 2SC2412K
R2701 22k :CHIP
R2702 22k :CHIP
R2703 22k :CHIP
R2704 22k :CHIP
CN2702 3P WHT :S-MICRO
ROUTATION
GND
15V
TO D BOARD CN0502
D7
(ROUTATION AMP)

B-SS4873<AEP>-D7.

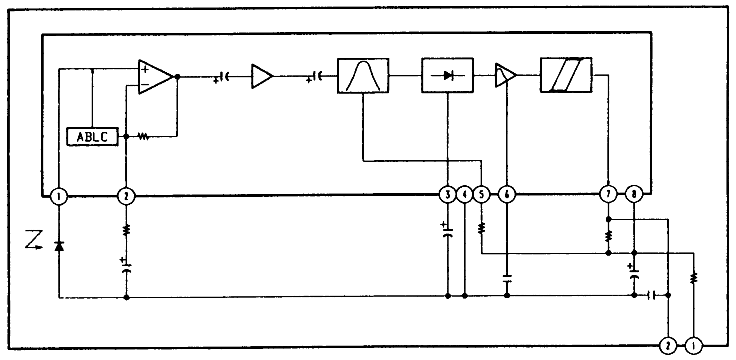

H1 (Y/C OUT, V/A OUT)
S081
S082
S083
R081 10k :CHIP
R082 4.7k :CHIP
R083 2.2k :CHIP
R084 1.5k 1/8W :CHIP
R085 1.5k 1/8W :CHIP
J81
R
L
3 (VIDEO)
3 (Y/C)
C081 100p :3216
C082 100p :3216
CN1008 10 WHT :S-MICRO
9V
FR R OUT
GND
FR L OUT
GND
FR V OUT
GND
FR C OUT
GND
FR Y OUT
TO J BOARD CN1206
CN1051 4P WHT :S-MICRO
LC
HP L IN
GND
HP R IN
TO A BOARD CN0151
L081 10μH
L082 10μH
C087 0.022 25V B:CHIP
C083 0.022 25V B:CHIP
J82
HEADPHONES

B-SS4873<AEP>-H1.

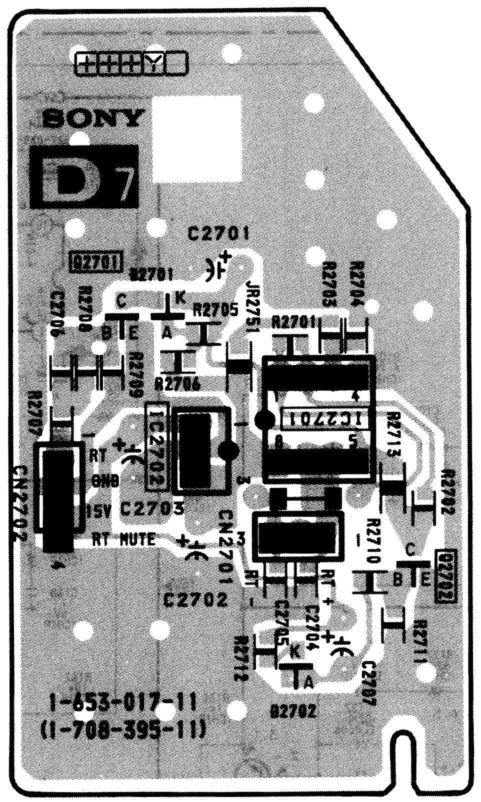

H2 (INFARER RECEIVER, STBY INDICATOR)
D092 LD-201VR
RES
IC091 SBX1610-11
R
D093 LD-201VR
D094 LD-201VR
A
B
5V
4.9
5.0
R091 470 1/8W :CHIP
GND
STBY-5V
LED RESP
SIRCS
STBY-5V
LED REC
LED B
LED A
CN1132 8P RED :S-MICRO
TO M3 BOARD CN1432

B-SS4873<AEP>-H2.

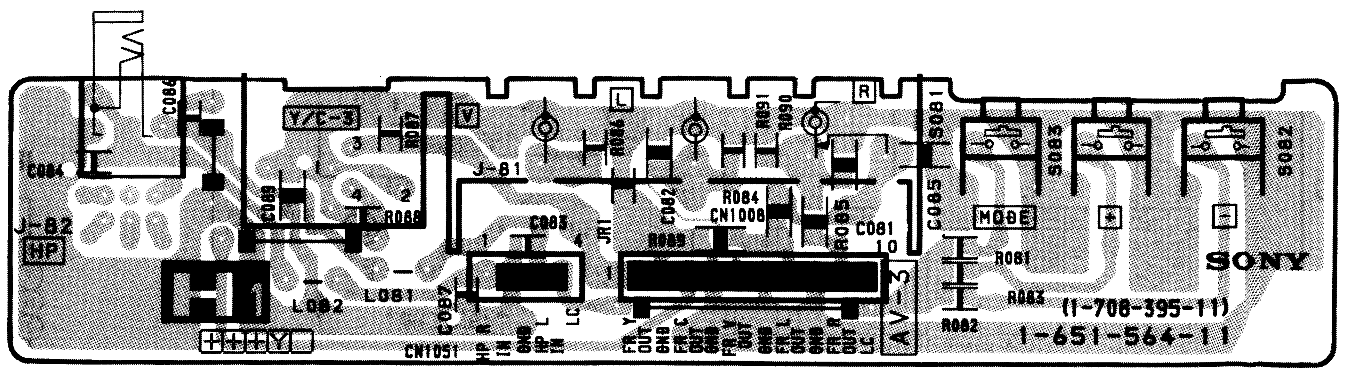
H2 BOARD IC091 SBX1610-11



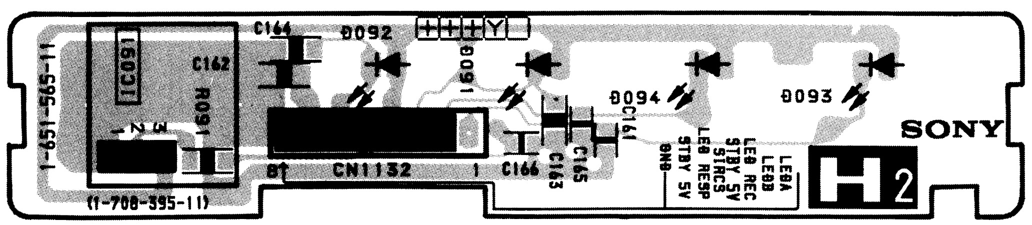
— D7 Board —


SONY
D7
C2701
Q2701
D2701
R2705
R2701
R2703
R2704
R2706
R2709
IC2701
IC2702
CN2702
CN2701
C2703
C2702
R2710
R2713
R2702
R2711
R2712
C2704
C2705
C2707
Q2702
RT
GND
15V
RT MUTE
1-653-017-11
(1-708-395-11)

— H1 Board —

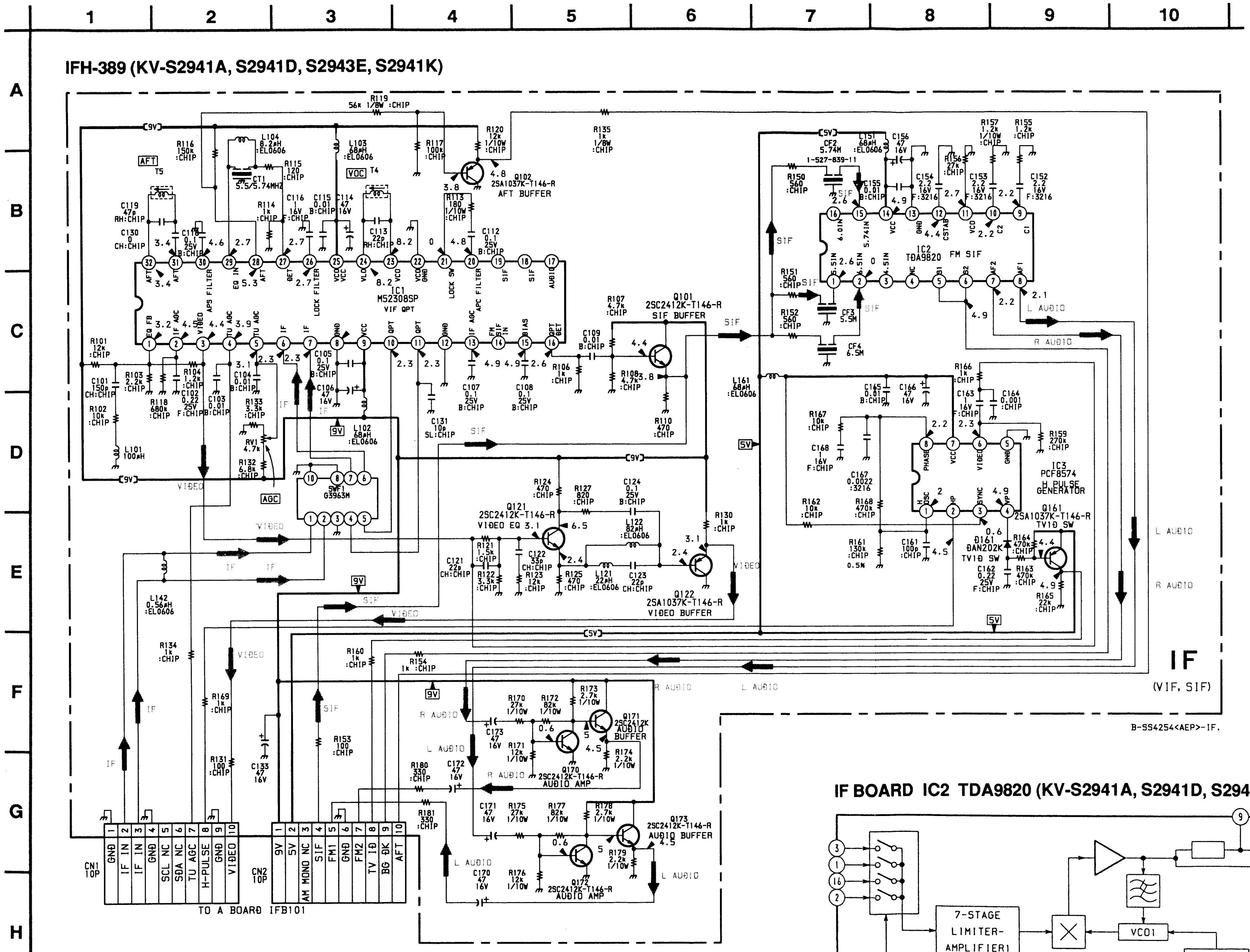

Y/C-3
V
L
R
J-81
J-82
HP
C084
C086
C089
R087
R088
C083
C082
R084
CN1008
R089
R085
C081
C085
S081
S083
S082
MODE
+
-
R081
R083
R082
L082
L081
C087
CN1051
AV-3
SONY
(1-708-395-11)
1-651-564-11

— H2 Board —


IC091
C162
R091
C164
D092
D090
D094
D093
C161
C165
C163
C166
CN1132
1-651-565-11
(1-708-395-11)
SONY
H2
LEDA
LEDB
LED REC
STBY 5V
SIRCS
LED RESP
STBY 5V
GND

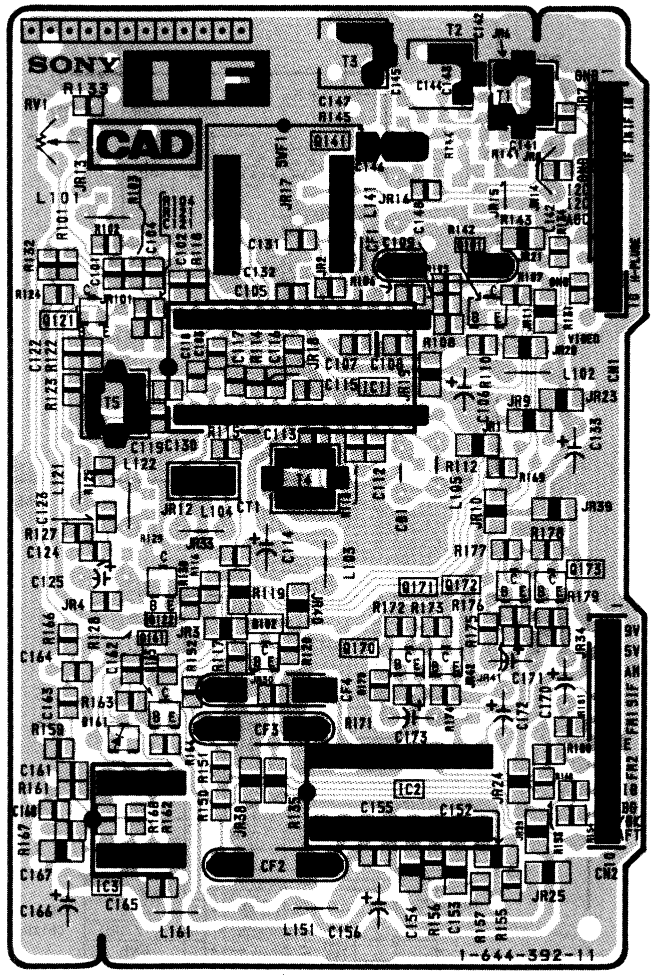
IF [VIF, SIF]

IFH-389 (KV-S2941A, S2941D, S2943E, S2941K)

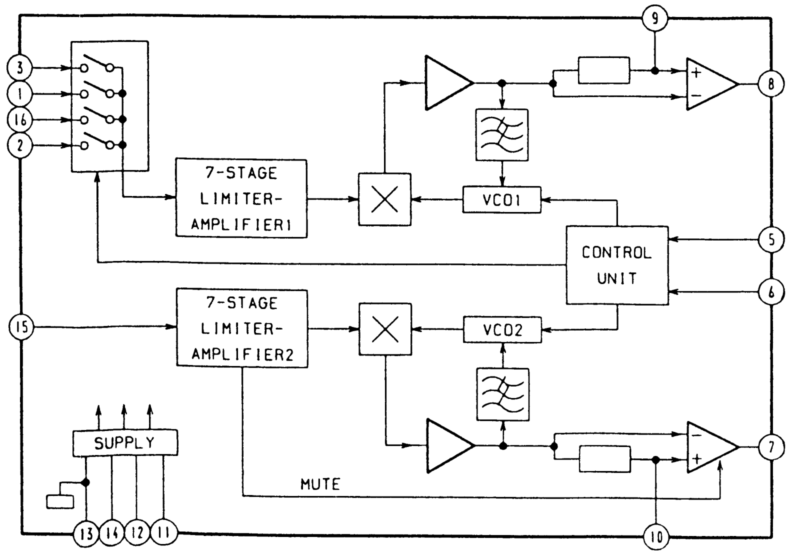

1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
G
H
I
IC1 M52308SP VIF QPT
IC2 TDA9820 FM SIF
IC3 PCF8574 H.PULSE GENERATOR
Q101 2SC2412K-T146-R SIF BUFFER
Q102 2SA1037K-T146-R AFT BUFFER
Q121 2SC2412K-T146-R VIDEO EQ
Q122 2SA1037K-T146-R VIDEO BUFFER
Q161 2SA1037K-T146-R TV10 SW
Q170 2SC2412K-T146-R AUDIO AMP
Q171 2SC2412K AUDIO BUFFER
Q172 2SC2412K-T146-R AUDIO AMP
Q173 2SC2412K-T146-R AUDIO BUFFER
D161 DAN202K TV10 SW
SWF1 G3963M
AFT T5
VCO T4
AGC
CT1 5.5/5.74MHz
CF2 5.74M 1-527-839-11
CF3 5.5M
CF4 6.5M
SIF
VIDEO
IF
L AUDIO
R AUDIO
9V
5V
CN1 10P
1 GND
2 IF IN
3 IF IN
4 GND
5 SCL NC
6 SDA NC
7 TU AGC
8 H-PULSE
9 GND
10 VIDEO
TO A BOARD IFB101
CN2 10P
1 9V
2 5V
3 AM MONO NC
4 SIF
5 FM1
6 GND
7 FM2
8 TV 10
9 BG DK
10 AFT
IF
(VIF, SIF)

B-SS4254<AEP>-IF.

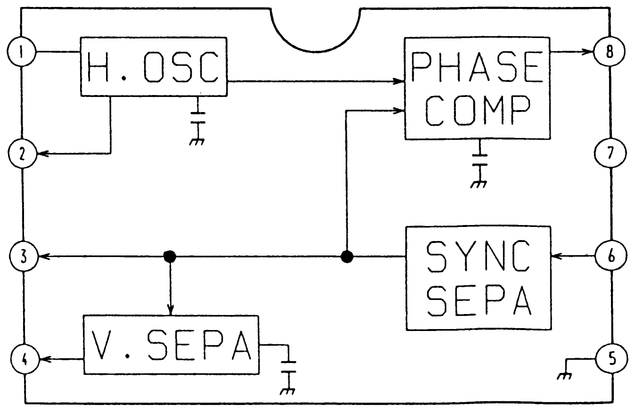
— IF Board — (KV-S2941A, S2941D, S2943E, S2941K)


SONY
IF
CAD
1-644-392-11

IF BOARD IC2 TDA9820 (KV-S2941A, S2941D, S2943E, S2941K)


7-STAGE LIMITER-AMPLIFIER1
VCO1
CONTROL UNIT
7-STAGE LIMITER-AMPLIFIER2
VCO2
SUPPLY
MUTE
1
2
3
5
6
7
8
9
10
11
12
13
14
15
16

IF BOARD IC3 BA7046
(KV-S2941A, S2941D, S2943E, S2941K, S2942U)


H.OSC
PHASE COMP
SYNC SEPA
V.SEPA
1
2
3
4
5
6
7
8

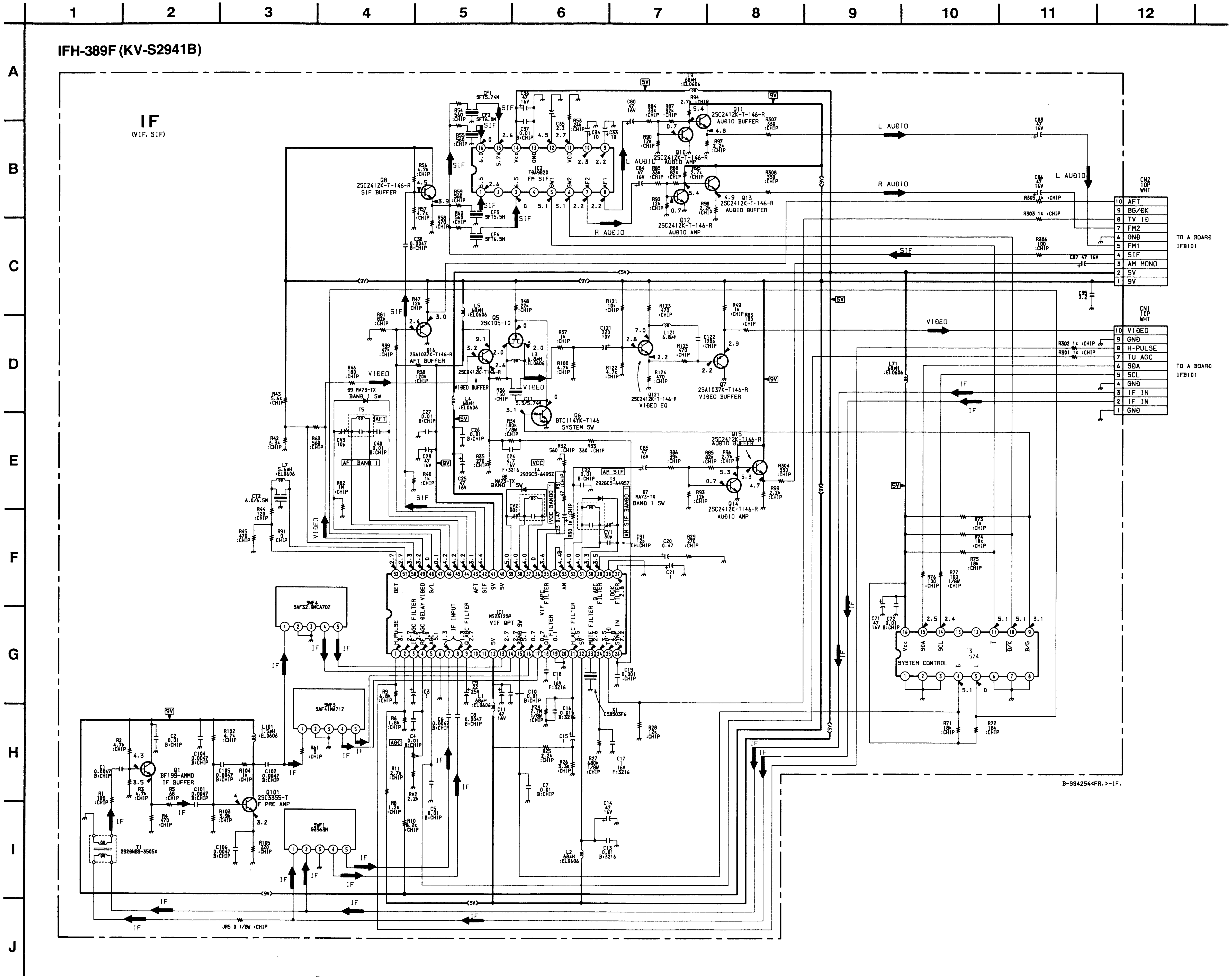
Schematic diagram

← D7 H1 H2 **board**

Schematic diagram

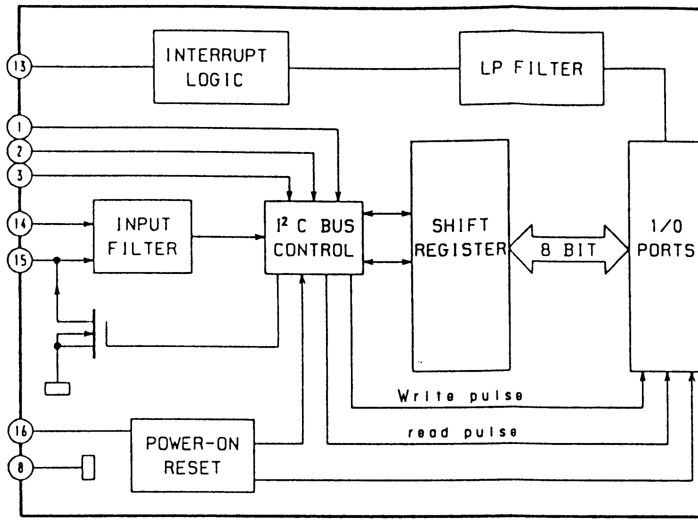
IF **board** →

IFH-389F (KV-S2941B)



1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H
I
J
IF
(VIF, SIF)
L AUDIO
R AUDIO
VIDEO
SIF
IF
IC1
M52312SP
VIF QPT
IC2
TBA9820
FM SIF
SYSTEM CONTROL
Q1
BF199-AMMO
IF BUFFER
Q101
2SC5355-T
IF PRE AMP
Q8
2SC2412K-T-146-R
SIF BUFFER
Q16
2SA1037K-T146-R
AFT BUFFER
Q4
2SC2412K-T146-R
VIDEO BUFFER
Q5
2SK105-10
Q6
DTC114YK-T146
SYSTEM SW
Q121
2SC2412K-T-146-R
VIDEO EQ
Q7
2SA1037K-T146-R
VIDEO BUFFER
Q10
2SC2412K-T-146-R
AUDIO AMP
Q11
2SC2412K-T-146-R
AUDIO BUFFER
Q12
2SC2412K-T-146-R
AUDIO AMP
Q13
2SC2412K-T-146-R
AUDIO BUFFER
Q14
2SC2412K-T-146-R
AUDIO AMP
Q15
2SC2412K-T-146-R
AUDIO BUFFER
SWF4
SAF32.9MCA70Z
SWF3
SAF41MA712
SWF1
03963M
T1
2920KBS-3505X
T4
2920C5-6495Z
T3
2920C5-6495Z
X1
CSB503F6
CN2
10P
WHT
10 AFT
9 BG/DK
8 TV ID
7 FM2
6 GND
5 FM1
4 SIF
3 AM MONO
2 5V
1 9V
TO A BOARD
IFB101
CN1
10P
WHT
10 VIDEO
9 GND
8 H-PULSE
7 TU AGC
6 SDA
5 SCL
4 GND
3 IF IN
2 IF IN
1 GND
TO A BOARD
IFB101
9V
5V
AFT
AGC
VDC
AM SIF
AFT BAND 1
B-SS4254<FR.>-IF.

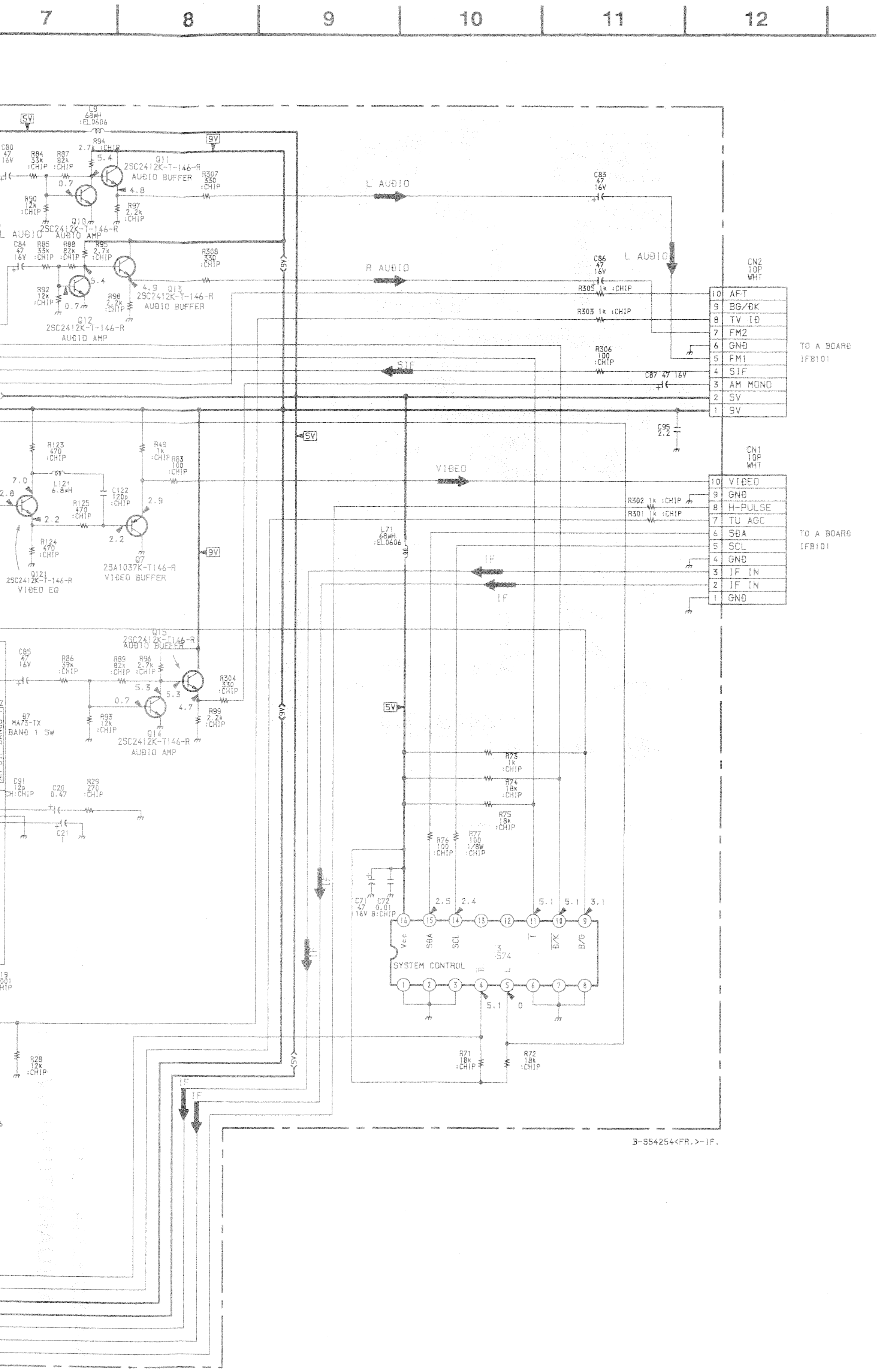
IF BOARD IC3 PC8574 (KV-S2941B)



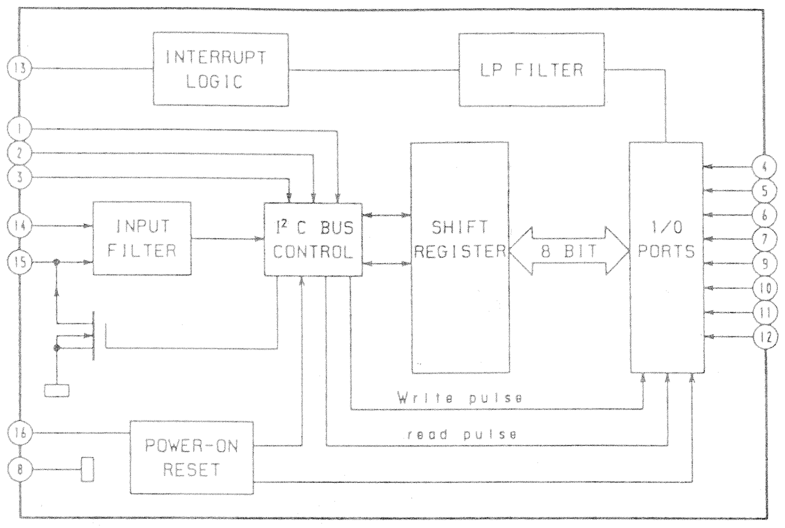
INTERRUPT LOGIC
LP FILTER
INPUT FILTER
I² C BUS CONTROL
SHIFT REGISTER
8 BIT
I/O PORTS
POWER-ON RESET
Write pulse
read pulse
13
1
2
3
14
15
16
8

Sche

← IF

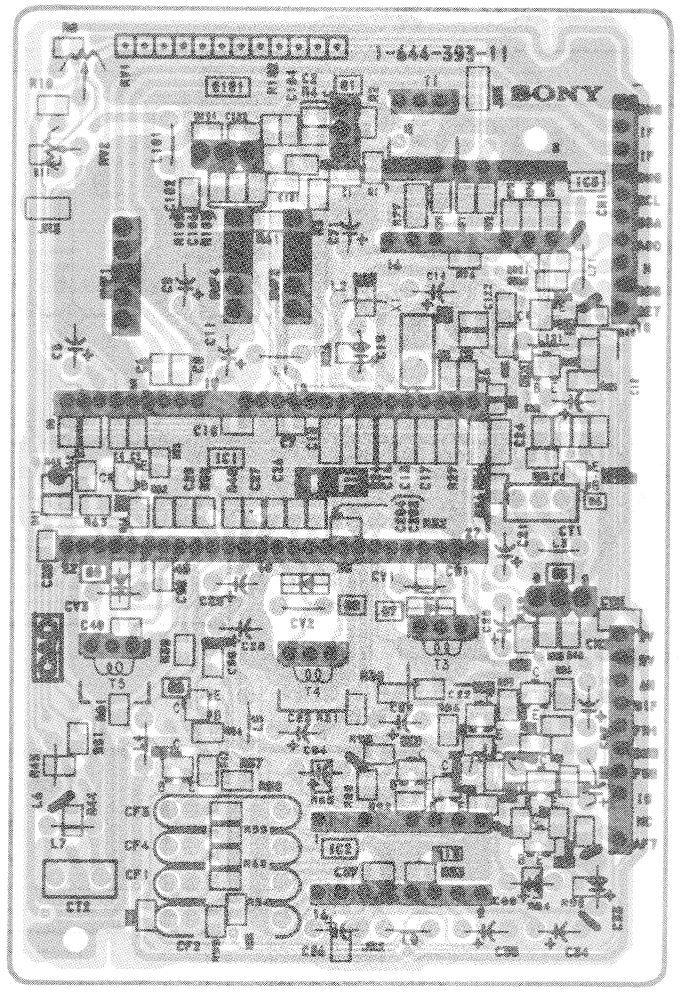

7
8
9
10
11
12
5V
9V
L AUDIO
R AUDIO
Q11 2SC2412K-T-146-R AUDIO BUFFER
Q10 2SC2412K-T-146-R AUDIO AMP
Q13 2SC2412K-T-146-R AUDIO BUFFER
Q12 2SC2412K-T-146-R AUDIO AMP
CN2 10P WHT
10 AFT
9 BG/DK
8 TV ID
7 FM2
6 GND
5 FM1
4 SIF
3 AM MONO
2 5V
1 9V
TO A BOARD IFB101
SIF
VIDEO
Q121 2SC2412K-T-146-R VIDEO EQ
Q7 2SA1037K-T146-R VIDEO BUFFER
CN1 10P WHT
10 VIDEO
9 GND
8 H-PULSE
7 TU AGC
6 SDA
5 SCL
4 GND
3 IF IN
2 IF IN
1 GND
TO A BOARD IFB101
IF
Q15 2SC2412K-T146-R AUDIO BUFFER
Q14 2SC2412K-T146-R AUDIO AMP
D7 MA73-TX BAND 1 SW
IC3 SYSTEM CONTROL
Vcc
SDA
SCL
B/G
B-554254<FR.>-IF.

IF BOARD IC3 PC8574 (KV-S2941B)


INTERRUPT LOGIC
LP FILTER
INPUT FILTER
I² C BUS CONTROL
SHIFT REGISTER
8 BIT
I/O PORTS
Write pulse
read pulse
POWER-ON RESET
13
1
2
3
14
15
16
8
4
5
6
7
9
10
11
12

IF [VIF, SIF]

— IF Board — (KV-S2941B)


1-644-393-11
SONY

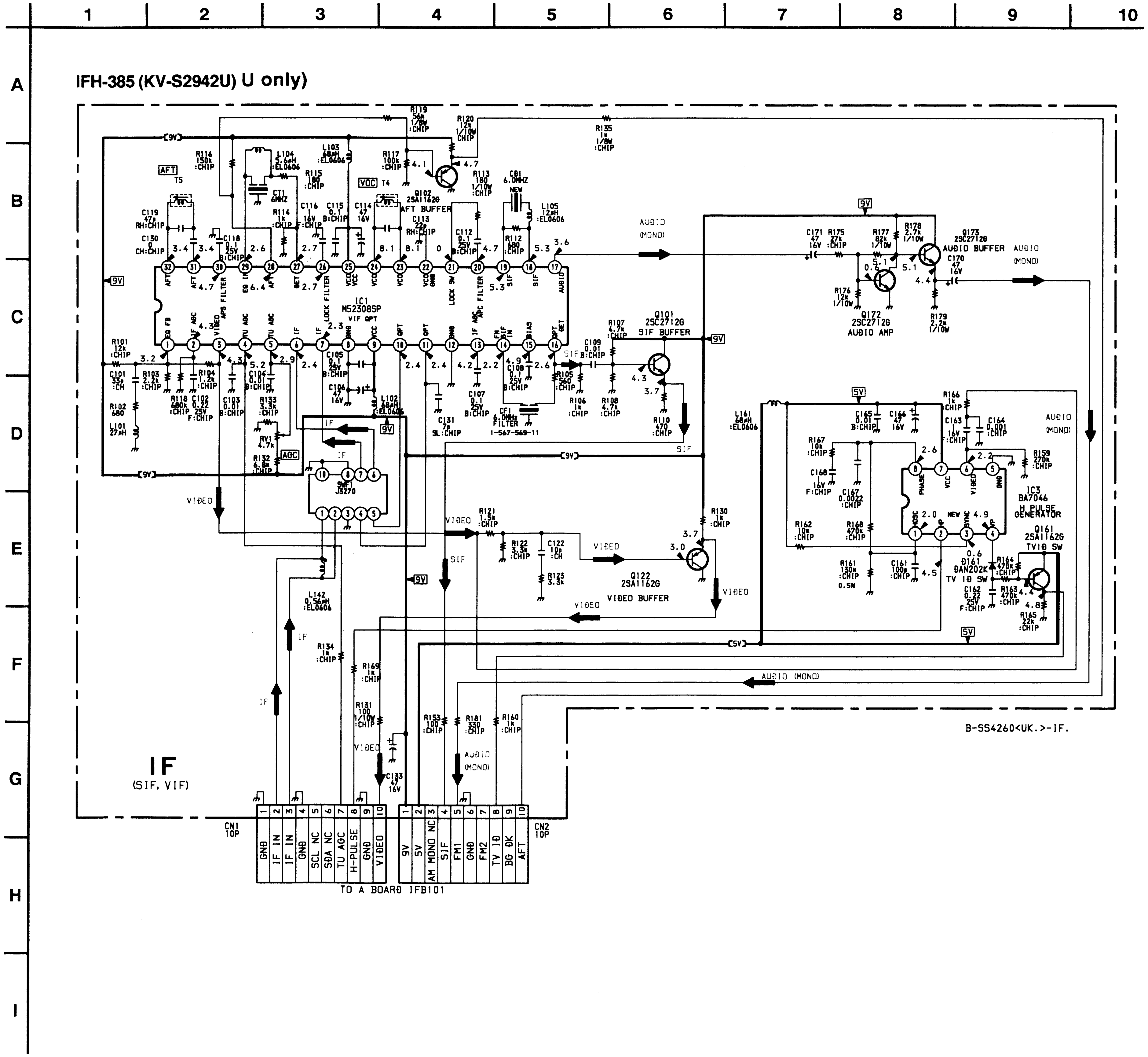
- ▨ : Pattern from the side which enables seeing.
- ▩ : Pattern of the rear side.

Schematic diagram

← IF board

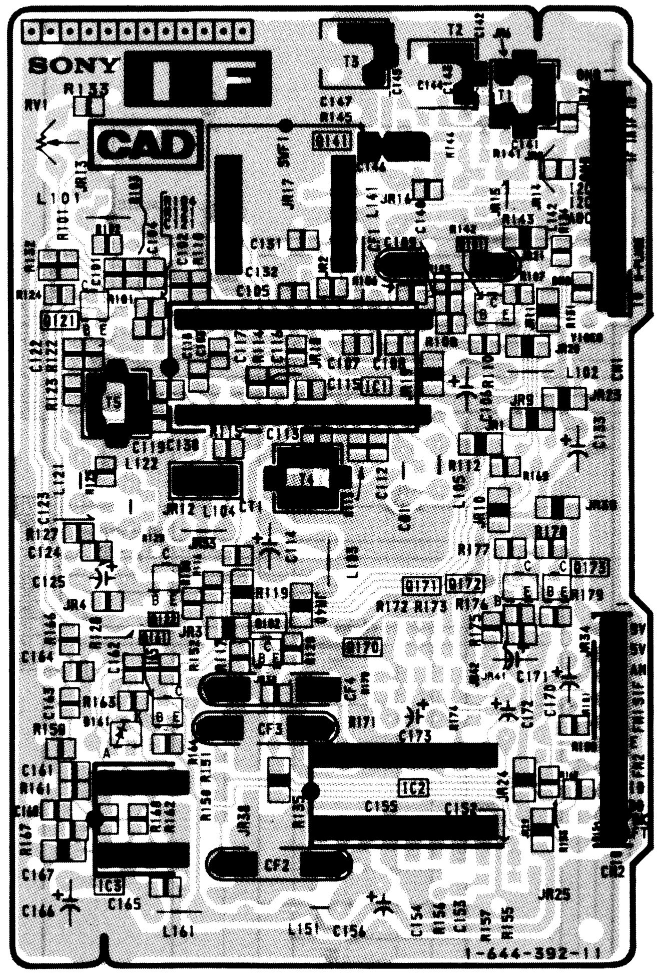
Schematic diagram

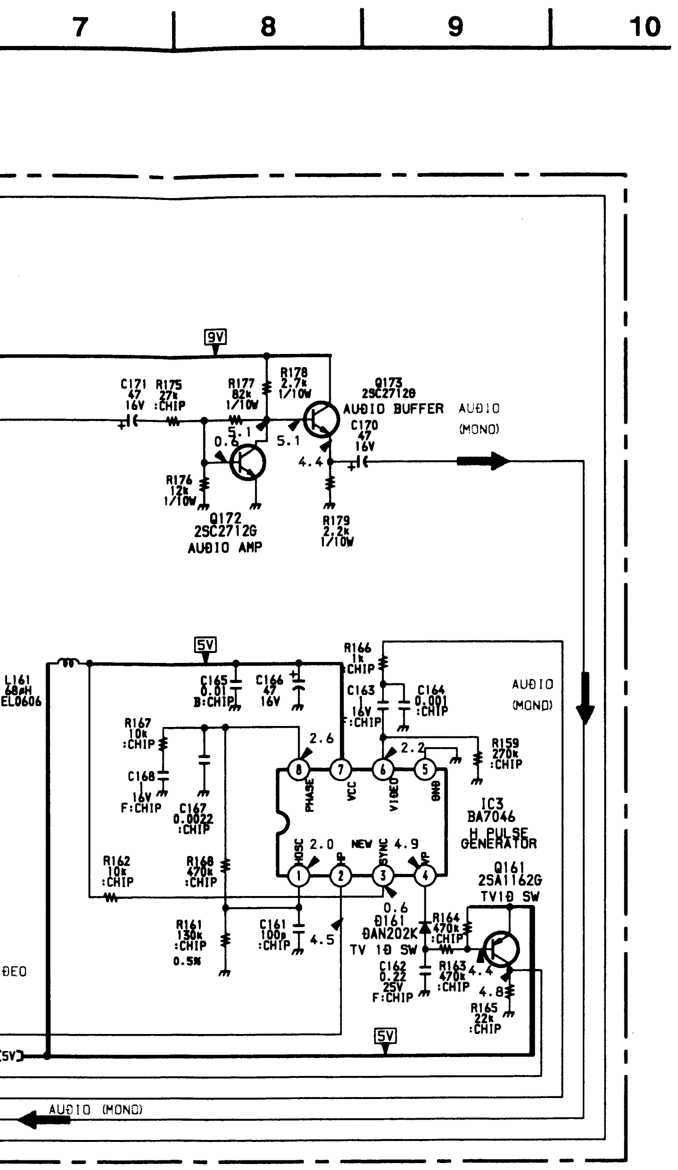
IF board →


IFH-385 (KV-S2942U) U only)
1 2 3 4 5 6 7 8 9 10
A B C D E F G H I
IC1 M52308SP VIF QPT
Q101 2SC2712G SIF BUFFER
Q102 2SA1162G AFT BUFFER
Q122 2SA1162G VIDEO BUFFER
Q172 2SC2712G AUDIO AMP
Q173 2SC2712G AUDIO BUFFER
IC3 BA7046 H PULSE GENERATOR
Q161 2SA1162G TV ID SW
D161 DAN202K TV ID SW
SWF1 J3270
CF1 6.0MHz FILTER 1-567-569-11
AFT T5
VCO T4
AGC
AUDIO (MONO)
VIDEO
SIF
IF
9V
5V
IF (SIF, VIF)
CN1 10P
CN2 10P
GND
IF IN
IF IN
GND
SCL NC
SDA NC
TU AGC
H-PULSE
GND
VIDEO
9V
5V
AM MONO NC
SIF
FM1
GND
FM2
TV ID
BG DK
AFT
TO A BOARD IFB101
B-SS4260<UK.>-IF.

IF [VIF, SIF]

— IF Board — (KV-S2942U)

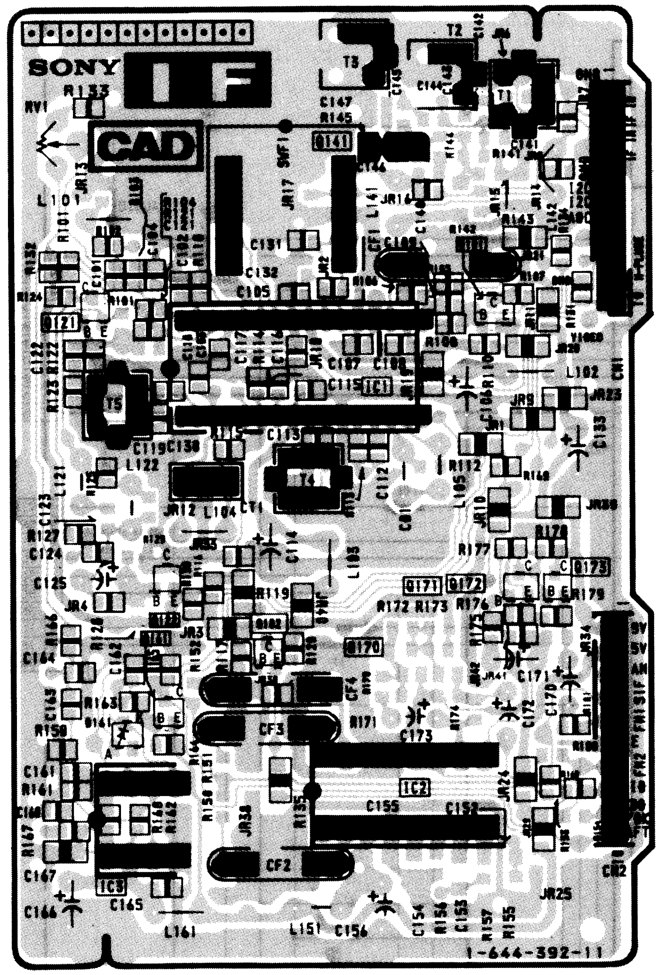

SONY
IF
CAD
IC1
IC2
IC3
T3
T4
T5
CF2
CF3
1-644-392-11


7
8
9
10
5V
Q173
2SC2712G
AUDIO BUFFER
AUDIO (MONO)
Q172
2SC2712G
AUDIO AMP
IC3
BA7046
H PULSE GENERATOR
Q161
2SA1162G
TV10 SW
D161
DAN202K
AUDIO (MONO)

B-SS4260<UK.>-IF.

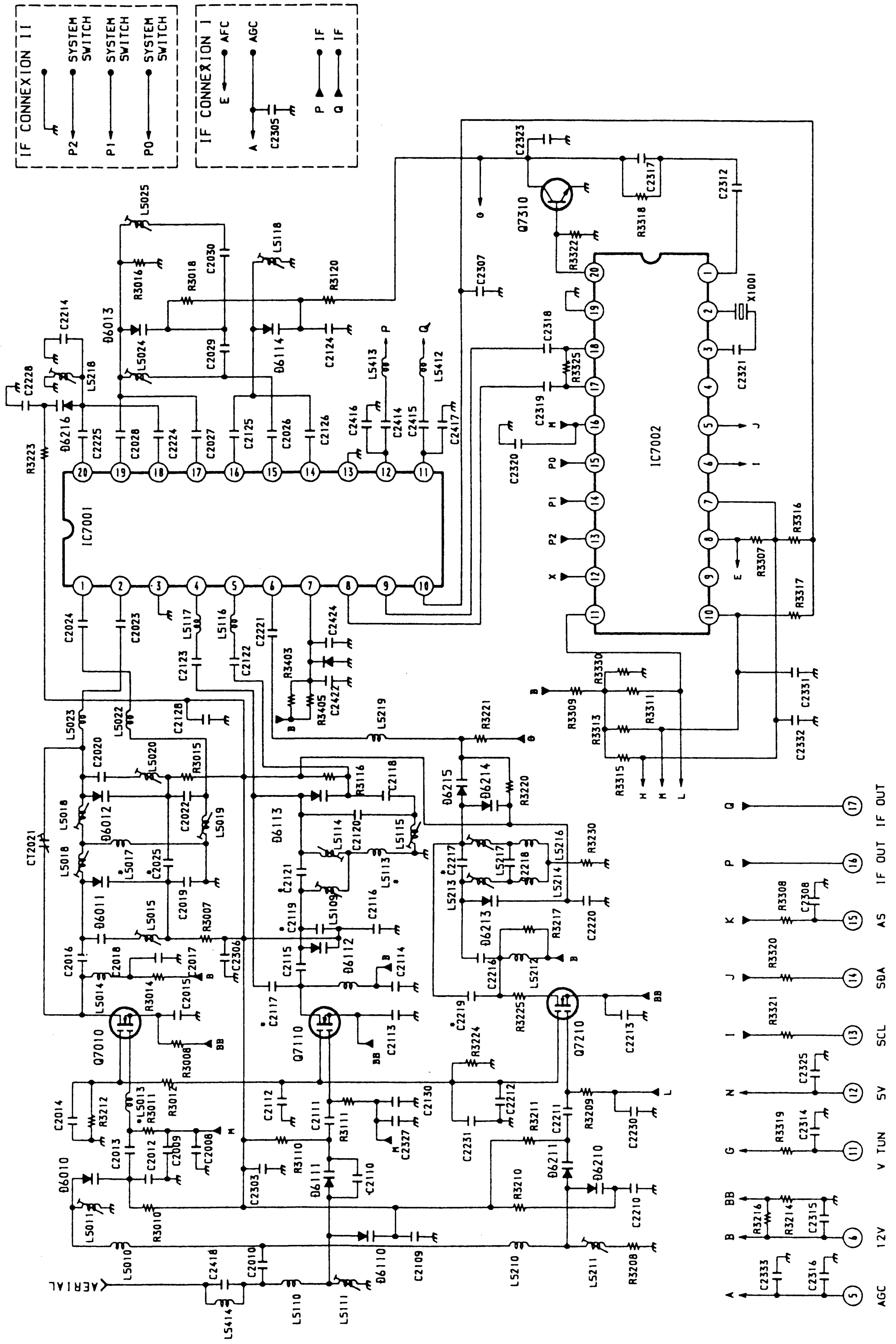
IF [VIF, SIF]

— IF Board — (KV-S2942U)


SONY
IF
CAD
1-644-392-11

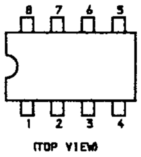
. SCHEMATIC DIAGRAM OF TUNER

A BOARD TU101 UV916H

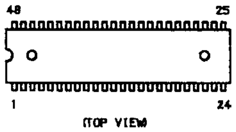

IF CONNEXION II
SYSTEM SWITCH
IF CONNEXION I
AFC
AGC
IF
IC7001
IC7002
Q7010
Q7110
Q7210
Q7310
X1001
AERIAL
AGC
12V
V TUN
5V
SCL
SDA
AS
IF OUT
IF OUT

SEMICONDUCTORS

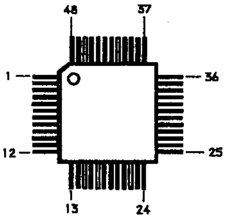
BA4558
LM393P
M5216P
SDA9086-5
ST24C16CB1
TDA2822M
TEA2114
µPC393C
µPC4558C
TDA2822M


8 7 6 5
1 2 3 4
(TOP VIEW)

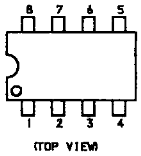
CXA1545AS


48
25
1
24
(TOP VIEW)

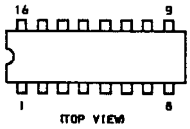
CXD2018Q


48
37
1
36
12
25
13
24

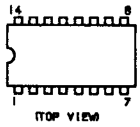
CXD2024Q-TL


8 7 6 5
1 2 3 4
(TOP VIEW)

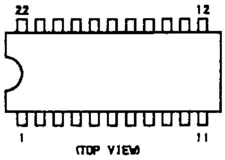
DM-48
MC14053BCP
MC34025P
SN74LS221N
TDA4661T/V2
YM7128
µPD4053BC


16
9
1
8
(TOP VIEW)

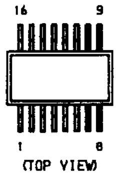
IR2112


14
8
1
7
(TOP VIEW)

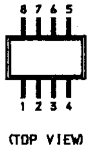
LA7856
LA7851MK


22
12
1
11
(TOP VIEW)

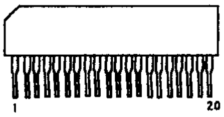
HEF4046BT


16
9
1
8
(TOP VIEW)

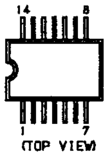
LM358D
LM358DR


8 7 6 5
1 2 3 4
(TOP VIEW)

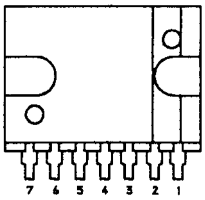
MB81C4256A-70PSZG



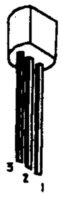
MC74F08DR2


14
8
1
7
(TOP VIEW)

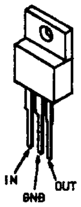
MC7815CT



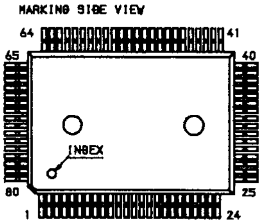
MC78L05ADPRP
MC78L08ACPRP
NJM78L05A



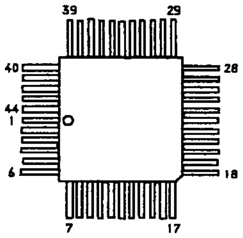
MC7809CT
NJM78M09FA



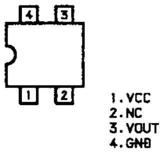
SAA4940H


MARKING SIDE VIEW
64
41
65
40
INDEX
80
25
1
24

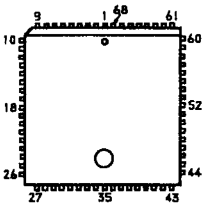
SAA4951
P87C652FBA-AE2F01


39
29
40
28
44
1
6
18
7
17

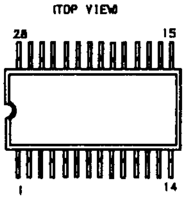
SFH617G-1


4
3
1
2
1.VCC
2.NC
3.VOUT
4.GND

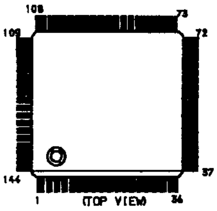
SAA7158
SDA30C162-GEG
SDA5273P-C22-GEG


9
1
68
61
10
60
18
52
26
44
27
35
43

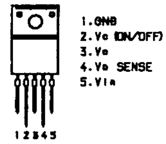
SDA9187-2XGEG
SDA9188-3XGEG


(TOP VIEW)
28
15
1
14

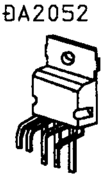
SI-3050CA


108
73
109
72
144
37
1
(TOP VIEW)
36

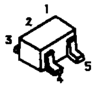
SI-3120C


1.GND
2.Vc (ON/OFF)
3.Vo
4.Vo SENSE
5.Vin
1 2 3 4 5

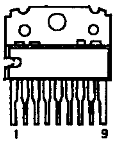
STV9379
TDA2052



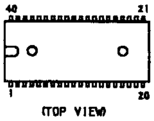
TC4S66F-TE85L



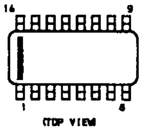
TDA6111Q



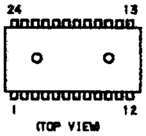
TDA2579B


40
21
1
20
(TOP VIEW)

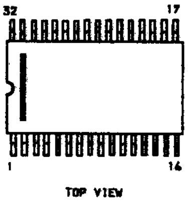
TDA6812-5


16
9
1
8
(TOP VIEW)

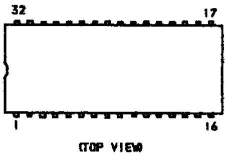
TDA8443B
TDA9145/N2B


24
13
1
12
(TOP VIEW)

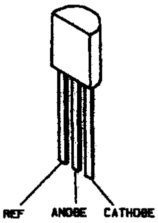
TDA8755


32
17
1
16
TOP VIEW

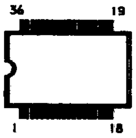
TDA9160/N2


32
17
1
16
(TOP VIEW)

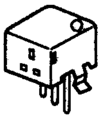
TL431CLP


REF
ANODE
CATHODE

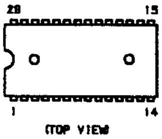
ZA2970-30DTR



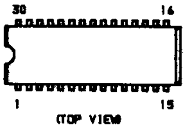
SBX1610-11



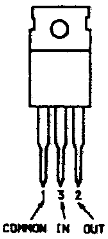
TDA4780


28
15
1
14
(TOP VIEW)

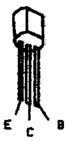
TDA7317


30
16
1
15
(TOP VIEW)

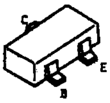
TEA7605


1
3
2
COMMON
IN
OUT

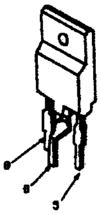
BF199



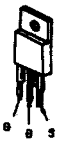
BF550
DTA114TK
DTA144EK
DTA144TK
DTC114EK
DTC124EK
DTC144EK
JC501Q
2SA1037K
2SA1162-G
2SC1623-L5L6
2SC2412K
2SC2412K-QR
2SC2413KQ
2SC2413KT146-Q
2SC2413KQ
2SC2785-HFE



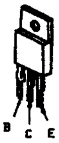
IRFI740G



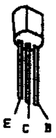
IRFIBC40



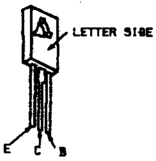
2SB1186A
2SA1837
2SC4793



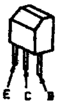
2SC2551Q



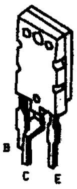
2SC2688-LK
2SC788-5


LETTER SIDE
E
C
B

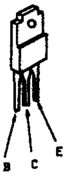
2SC3733
2SD774-34



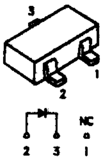
2SC3997CA



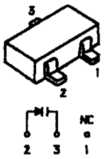
2SC4793
2SD1763A



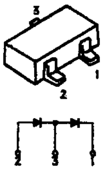
BAS16
MA3039H-TX
MA3056M
RD5.6M-B2



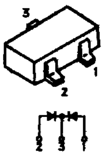
BBY40



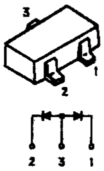
DA204K



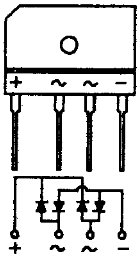
DAN202K



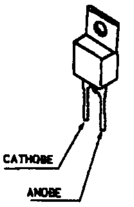
DAP202K



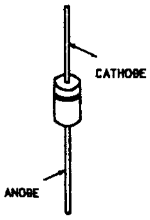
D4SB60L
RBA402L
RBA406B



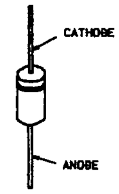
ERD08M-15


CATHODE
ANODE

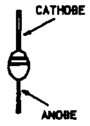
EGP10GPKG23
EGP10D


CATHODE
ANODE

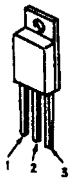
D1N20R
EL1Z
GP08D
GP08DPKG23
MTZJ-9.1
NTZJ-33C
NTZJ-39C
RGP02-20EL-6394
RGP10GPKG23
1SS83


CATHODE
ANODE

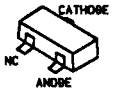
ERC38-06


CATHODE
ANODE

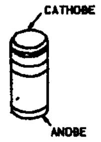
ESAD39M-06C



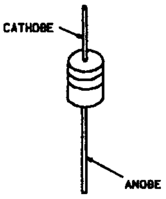
MA3027H
MA3030H


CATHODE
NC
ANODE

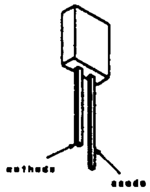
MA3051L-TX
MA3056H-TX


CATHODE
ANODE

MTZJ-13B
MTZJ-15B
MTZJ-18B
MTZJ-3.6A
MTZJ-36B
MTZJ-5.1B
MTZJ-5.6B
MTZJ-7.5A
MTZJ-9.1B
RD15ESB2
RD18ESB2
RD5.1ESB2
RD5.6ESB2
RD7.5ESB2
1SS133
1SS119


CATHODE
ANODE

LD-201VR


cathode
anode

EXPLODED VIEWS

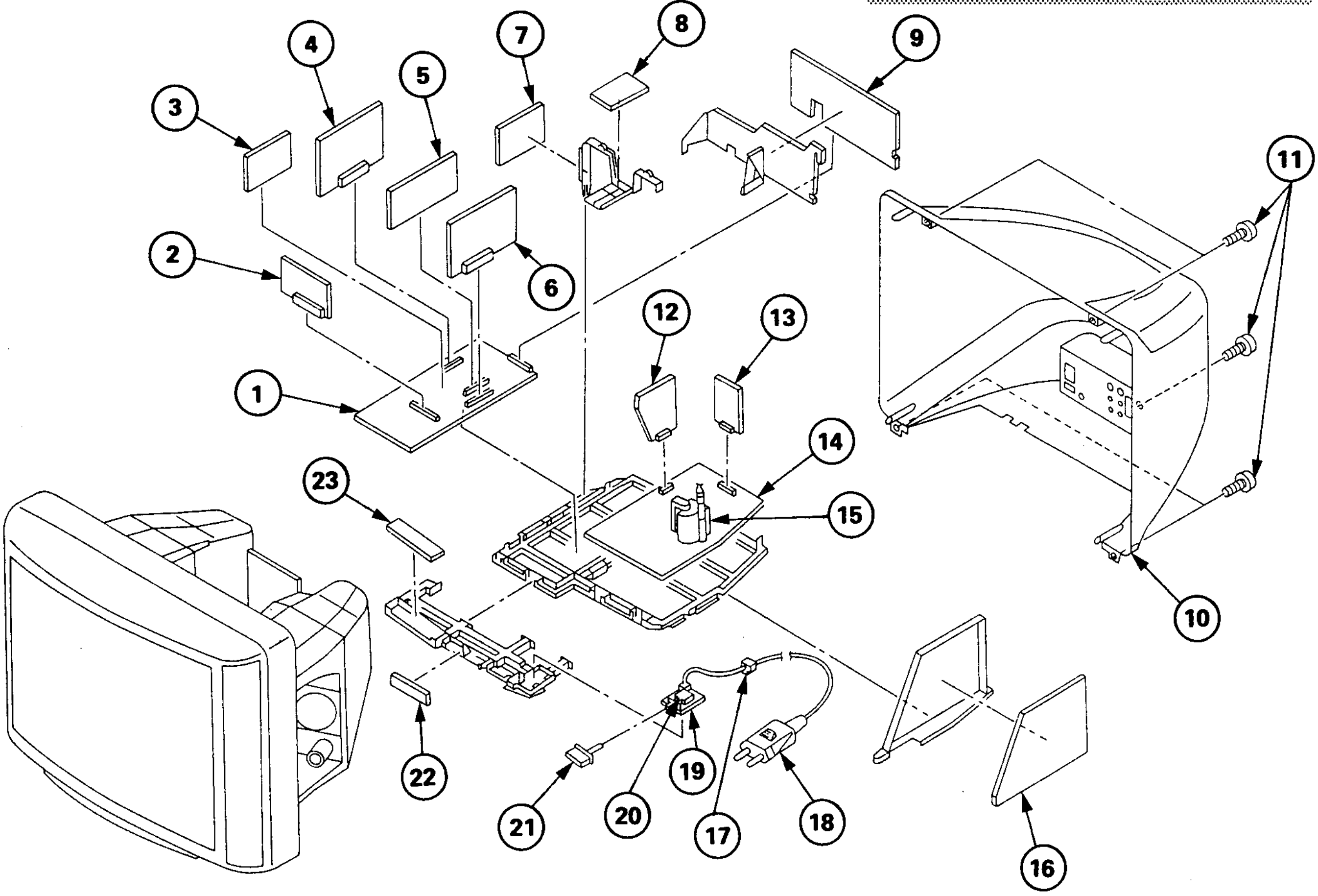
NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

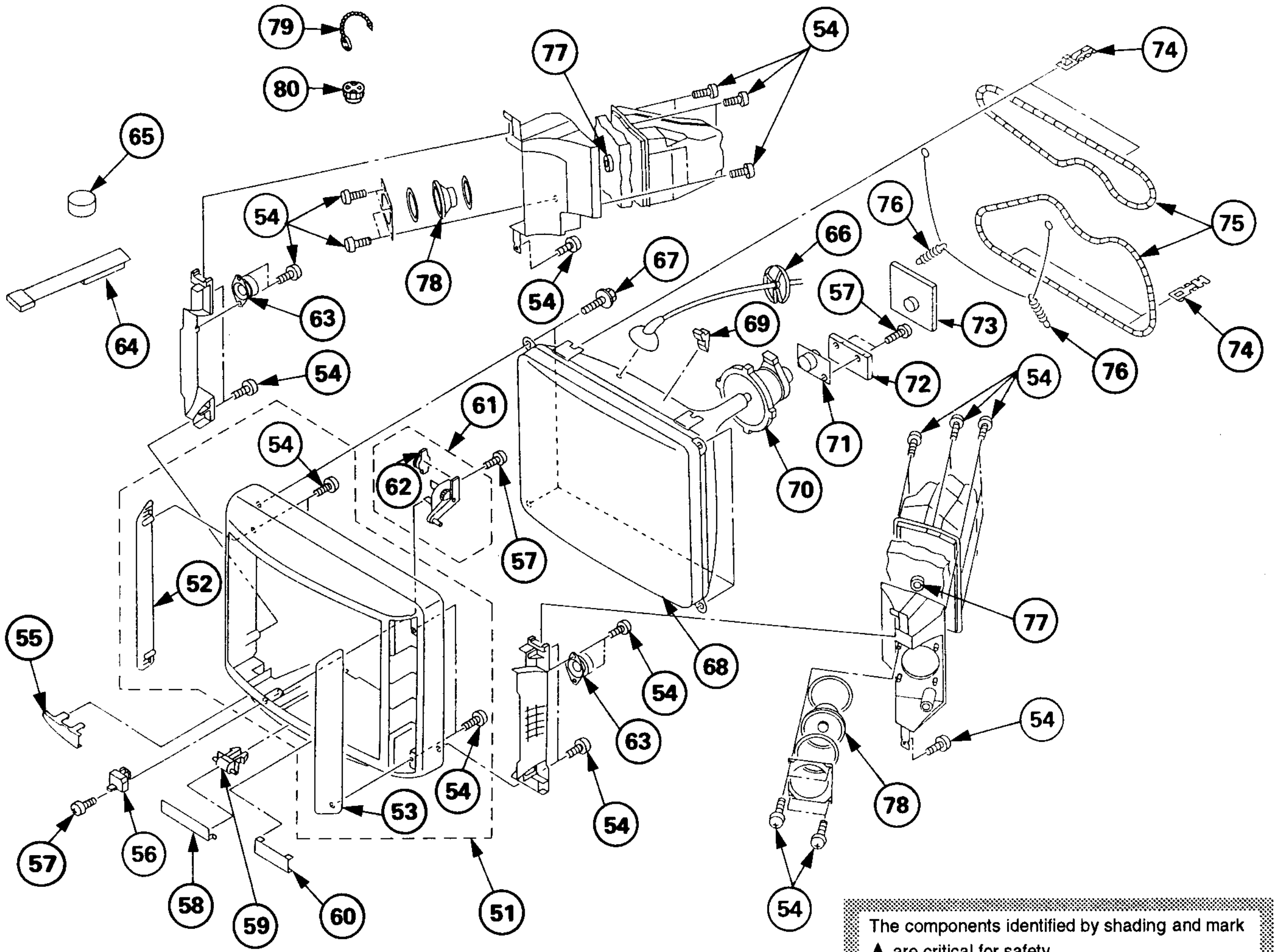
Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-1. CHASSIS



REF.NO.	PART NO.	DESCRIPTION	REMARK
1	*A-1632-172-A	A BOARD, COMPLETE (KV-S2941A,S2941D,S2943E,S2941K)	
	*A-1632-187-A	A BOARD, COMPLETE (KV-S2941B)	
	*A-1632-188-A	A BOARD, COMPLETE (KV-S2942U)	
2	*A-1635-018-A	M3 BOARD, COMPLETE	
3	⚠1-693-184-11	TUNER (UP44C) (KV-S2942U)	
	⚠1-693-185-11	TUNER (UV916H) (KV-S2941A,S2941B,S2941D,S2943E,S2941K)	
4	*A-1630-214-A	A2 BOARD, COMPLETE (KV-S2941A,S2941B,S2941D,S2941K)	
	*A-1630-215-A	A2 BOARD, COMPLETE (KV-S2943E)	
	*A-1630-216-A	A2 BOARD, COMPLETE (KV-S2942U)	
5	*A-1621-050-A	B BOARDD, COMPLETE	
6	*A-1626-001-A	Q BOARDCOMPLETE	
7	*A-1642-126-A	E2 BOARD, COMPLETE (KV-S2941B)	
8	*A-1640-143-A	D7 BOARD, COMPLETE	
9	*A-1651-060-A	J BOARD, COMPLETE	
10	4-202-146-11	COVER, REAR	
11	4-039-358-01	SCREW (4X16), (+) BV TAPPING	
12	*A-1642-111-A	D2 BOARD, COMPLETE	
13	*A-1640-125-A	D6 BOARD, COMPLETE	
14	*A-1642-110-A	D BOARD, COMPLETE	
15	⚠8-598-943-00	TRANSFORMER ASSY, FLYBACK(NX-2661//U2B)	
16	*A-1636-004-A	G BOARD, COMPLETE	
17	4-038-615-01	HOLDER, AC CORD	
18	⚠1-751-680-11	CORD, POWER(WITH NOISE FILTER) 2.5A/250V (KV-S2941A,S2941B,S2941D, S2943E,S2941K)	
	⚠1-590-762-11	CORD, POWER(WITH PLUG) 2.5A/250V (KV-S2942U)	
19	*A-1624-028-A	F1 BOARD, COMPLETE	
20	⚠1-571-433-12	SWITCH, PUSH (AC POWER)	
21	4-202-124-01	BUTTON, POWER	
22	*A-1646-056-A	H2 BOARD, COMPLETE	
23	*A-1646-055-A	H1 BOARD, COMPLETE	

PICTURE TUBE



The components identified by shading and mark ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION	REMARK
51	X-4200-149-1	BEZNET ASSY	52-54
52	4-202-629-01	GRILLE (L), SPEAKER	
53	4-202-628-01	GRILLE (R), SPEAKER	
54	4-039-358-01	SCREW (4X16), (+) BV TAPPING	
55	4-202-127-41	PLATE, ORNAMENTAL (KV-S2941A,S2941B,S2941D,S2943E,S2941K)	
55	4-202-127-51	PLATE, ORNAMENTAL (KV-S2942U)	
56	4-036-881-01	LOCK ASSY, DOOR	
57	4-039-356-01	SCREW (3X12), (+) BV TAPPING	
58	4-202-125-01	DOOR	
59	4-202-555-01	SHAFT, DOOR	
60	4-202-123-01	WINDOW, ORNAMENTAL	
61	X-4030-459-1	DAMPER ASSY	62
62	4-036-880-11	DAMPER	
63	1-504-121-21	SPEAKER (SQUAWKER) (5CM)	

REF.NO.	PART NO.	DESCRIPTION	REMARK
64	X-4387-214-1	PERMALLOY ASSY, CORRECTION	
65	1-452-032-00	MAGNET, DISK; 10MM ϕ	
66	*4-202-554-01	HOLDER, HV CABLE	
67	4-036-188-01	SCREW (M), PT	
68	⚠8-733-841-05	PICTURE TUBE 29GX (M68KZT10X)	
69	3-704-495-01	SPACER, DY	
70	⚠8-451-444-11	DEFLECTION YOKE Y29GXC (MTY)	
71	⚠1-452-509-12	NECK ASSY, PICTURE TUBE (NA-308)	
72	*A-1644-048-A	VM BOARD, COMPLETE	
73	*A-1638-044-A	C BOARD, COMPLETE	
74	4-202-415-01	CLIP, DGC (29")	
75	⚠1-406-807-11	COIL, DEMAGNETIZATION	
76	4-369-318-51	SPRING, TENSION	
77	4-200-630-01	CUSHION, FOOT	
78	1-504-145-11	SPEAKER (12CM)	
79	4-308-870-00	CLIP,LEAD WIRE	
80	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ	

B

ELECTRICAL PARTS LIST

NOTE:

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
All resistors are in ohms
F: nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS
- MF: μF, PF: μμF

COILS
- MMH: mH, UH: μH

REF.NO.	PART NO.	DESCRIPTION			REMARK
	*A-1621-050-A	B BOARD, COMPLETE			
		*****************			
		<CAPACITOR>			
C301	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C302	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C303	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C304	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C305	1-163-096-00	CERAMIC CHIP	13PF	5%	50V
C306	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C307	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C308	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C309	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C310	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C311	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C313	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C314	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C316	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C317	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C318	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C320	1-124-910-11	ELECT	47MF	20%	50V
C321	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C325	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C330	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C340	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C360	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C501	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C503	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C504	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C505	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C506	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C507	1-126-101-11	ELECT	100MF	20%	16V
C508	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C509	1-124-925-11	ELECT	2.2MF	20%	50V
C510	1-124-916-11	ELECT	22MF	20%	50V
C511	1-124-927-11	ELECT	4.7MF	20%	50V
C512	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C513	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C514	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C515	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C516	1-163-014-00	CERAMIC CHIP	0.0027MF	10%	50V
C520	9-910-999-3A	FILM	0.0022MF	2%	100V
C521	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C530	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C560	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1401	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1402	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1403	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C1404	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C1405	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C1406	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C1407	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1408	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C1409	1-124-903-11	ELECT	1MF	20%	50V
C1410	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1411	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1412	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1414	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C1416	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C1417	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C1418	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1419	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1420	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1421	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1422	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1423	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1424	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1425	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1426	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C1427	1-124-916-11	ELECT	22MF	20%	50V
C1428	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1430	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1431	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1432	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1433	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1434	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1435	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1437	1-164-343-11	CERAMIC CHIP	0.056MF	10%	25V
C1438	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1439	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1440	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C1441	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1442	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1443	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1444	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1445	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1446	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1447	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1448	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C1449	1-163-257-11	CERAMIC CHIP	180PF	5%	50V
C1450	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1452	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1453	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1454	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1455	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C1457	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1458	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C1459	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C1460	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1461	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1462	1-164-005-11	CERAMIC CHIP	0.47MF		25V

B

REF.NO.	PART NO.	DESCRIPTION			REMARK
C1463	1-126-101-11	ELECT	100MF	20%	16V
C1464	1-126-101-11	ELECT	100MF	20%	16V
C1465	1-126-101-11	ELECT	100MF	20%	16V
C1466	1-126-101-11	ELECT	100MF	20%	16V
C1467	1-126-101-11	ELECT	100MF	20%	16V
C1468	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C1469	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C1470	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C1471	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1472	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1473	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1474	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1475	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1476	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1477	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1479	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1480	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1481	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1483	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1487	1-126-101-11	ELECT	100MF	20%	16V
C1491	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1492	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C1493	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C1494	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C1495	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C1496	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C1497	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C1498	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C1499	1-163-239-11	CERAMIC CHIP	33PF	5%	50V

<CONNECTOR>

CN302	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P

<DIODE>

D301	8-719-914-43	DIODE DAN202K
D304	8-719-401-41	DIODE MA3051L-TX
D501	8-719-401-53	DIODE MA3056H-TX
D1401	8-719-401-41	DIODE MA3051L-TX
D1405	8-719-914-42	DIODE DA204K

<DELAY LINE>

DL301	1-415-652-11	DC (LC)

<FILTER>

FL1403	1-236-071-11	ENCAPSULATED COMPONENT
FL1404	1-236-071-11	ENCAPSULATED COMPONENT
FL1405	1-236-071-11	ENCAPSULATED COMPONENT
FL1406	1-236-071-11	ENCAPSULATED COMPONENT
FL1407	1-236-071-11	ENCAPSULATED COMPONENT
FL1408	1-236-071-11	ENCAPSULATED COMPONENT
FL1409	1-236-071-11	ENCAPSULATED COMPONENT
FL1410	1-236-071-11	ENCAPSULATED COMPONENT

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC301	8-759-189-90	IC TDA9145/N2B	
IC302	8-759-086-97	IC TDA4661T/V2	
IC303	8-759-037-45	IC MC78L08ACPRP	
IC501	8-759-181-19	IC TDA2579B	
IC1401	8-759-073-16	IC TDA9160/N2	
IC1402	8-759-086-97	IC TDA4661T/V2	
IC1403	8-759-248-15	IC SDA9187-2XGEG	
IC1404	8-759-192-90	IC SDA9188-3XGEG	
IC1405	8-759-248-91	IC SDA9086-5	
IC1406	8-759-183-36	IC TDA8443B	
IC1407	8-759-183-36	IC TDA8443B	
IC1410	8-759-037-45	IC MC78L08ACPRP	
IC1411	8-759-708-05	IC NJM78L05A	

<COIL>

L307	1-408-405-00	INDUCTOR	4.7UH
L1401	1-408-418-00	INDUCTOR	56UH
L1402	1-408-418-00	INDUCTOR	56UH

<TRANSISTOR>

Q301	8-729-901-00	TRANSISTOR DTC124EK
Q302	8-729-216-22	TRANSISTOR 2SA1162-G
Q305	8-729-901-01	TRANSISTOR DTC144EK
Q310	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q311	8-729-216-22	TRANSISTOR 2SA1162-G
Q313	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q501	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q502	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q503	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q504	8-729-216-22	TRANSISTOR 2SA1162-G
Q505	8-729-900-53	TRANSISTOR DTC114EK
Q506	8-729-901-04	TRANSISTOR DTA114EK
Q507	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q510	8-729-900-53	TRANSISTOR DTC114EK
Q1401	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1402	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1403	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1404	8-729-216-22	TRANSISTOR 2SA1162-G
Q1405	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1406	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1407	8-729-216-22	TRANSISTOR 2SA1162-G
Q1408	8-729-216-22	TRANSISTOR 2SA1162-G
Q1409	8-729-216-22	TRANSISTOR 2SA1162-G
Q1416	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1417	8-729-900-53	TRANSISTOR DTC114EK
Q1419	8-729-900-53	TRANSISTOR DTC114EK
Q1421	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1422	8-729-216-22	TRANSISTOR 2SA1162-G
Q1423	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1424	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1425	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1426	8-729-900-53	TRANSISTOR DTC114EK
Q1430	8-729-900-53	TRANSISTOR DTC114EK
Q1431	8-729-901-04	TRANSISTOR DTA114EK

<RESISTOR>

R301	1-216-041-00	METAL GLAZE	470	5%	1/10W
R302	1-216-041-00	METAL GLAZE	470	5%	1/10W
R303	1-216-025-00	METAL GLAZE	100	5%	1/10W
R304	1-216-025-00	METAL GLAZE	100	5%	1/10W
R306	1-216-035-00	METAL GLAZE	270	5%	1/10W
R307	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R312	1-216-041-00	METAL GLAZE	470	5%	1/10W
R313	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R316	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R317	1-216-073-00	METAL GLAZE	10K	5%	1/10W

B

REF.NO.	PART NO.	DESCRIPTION				REMARK
R318	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R319	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R320	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R321	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R322	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R331	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R332	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R333	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R340	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R341	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R342	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R343	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R344	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R360	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R365	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R370	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R371	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R501	1-216-687-11	METAL CHIP	33K	0.50%	1/10W	
R502	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R503	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R506	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R508	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R509	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R510	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R512	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R513	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R514	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R515	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R516	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R517	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R518	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R519	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R520	1-216-009-00	METAL GLAZE	22	5%	1/10W	
R521	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R522	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R523	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R524	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R525	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R526	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R527	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R528	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R529	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R530	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R531	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R532	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R533	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R535	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R550	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1401	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1402	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1403	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1404	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1405	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1406	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R1407	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1408	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1410	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R1411	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1412	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1413	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1414	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1415	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1416	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R1417	1-216-033-00	METAL GLAZE	220	5%	1/10W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1418	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1419	1-216-027-00	METAL GLAZE	120	5%	1/10W	
R1421	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1422	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R1423	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1424	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1425	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1427	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1429	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R1430	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1431	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1432	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1433	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1434	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R1435	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R1436	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R1437	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R1438	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1439	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1440	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1441	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1442	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1443	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1444	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1445	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R1446	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R1449	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1450	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1453	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1454	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1457	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1458	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1459	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1460	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1462	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1463	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1468	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1469	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1470	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1471	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R1472	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1473	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1474	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1475	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1477	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R1478	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R1479	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R1480	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1481	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1483	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R1484	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1485	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1486	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R1487	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1489	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1490	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R1493	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R1494	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1495	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1496	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1497	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1498	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1499	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

<VARIABLE RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
RV501	1-241-763-11	RES, ADJ, CERMET 4.7K	

<CRYSTAL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
X301	1-567-504-11	OSCILLATOR, CRYSTAL	
X302	1-567-505-11	OSCILLATOR, CRYSTAL	
X1401	1-567-505-11	OSCILLATOR, CRYSTAL	
X1402	1-567-504-11	OSCILLATOR, CRYSTAL	

****

*A-1624-028-A F1 BOARD, COMPLETE
****

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN0003⚠	*1-580-844-11	PIN, CONNECTOR (POWER)	
CN0831⚠	*1-695-292-11	PIN, CONNECTOR (POWER)	

<FUSE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
F651 ⚠	1-576-232-21	FUSE (H.B.C.) 5.0A/250V	
	1-533-230-11	HOLDER, FUSE	

<SWITCH>

REF.NO.	PART NO.	DESCRIPTION	REMARK
S651 ⚠	1-571-433-12	SWITCH, PUSH (AC POWER)	

****

*A-1626-001-A Q BOARD, COMPLETE
****

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
C1	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3	1-124-927-11	ELECT	4.7MF	20%	50V
C4	1-164-299-11	CERAMIC CHIP	0.22MF	10%	25V
C5	1-162-568-11	CERAMIC CHIP	0.33MF	10%	16V
C6	1-124-907-11	ELECT	10MF	20%	50V
C7	1-163-077-91	CERAMIC CHIP	0.1MF		50V
C8	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C10	1-124-927-11	ELECT	4.7MF	20%	50V
C11	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C12	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C13	1-162-638-11	CERAMIC CHIP	1MF		16V
C14	1-124-927-11	ELECT	4.7MF	20%	50V
C15	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C17	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V
C18	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V
C19	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C20	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C21	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C22	1-163-081-00	CERAMIC CHIP	0.22MF		25V
C23	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C24	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C25	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C26	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C27	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C28	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C29	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C30	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C31	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C32	1-124-925-11	ELECT	2.2MF	20%	50V
C33	1-124-907-11	ELECT	10MF	20%	50V
C34	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C35	1-124-907-11	ELECT	10MF	20%	50V
C36	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C37	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C38	1-163-161-00	CERAMIC CHIP	15PF	5%	50V
C39	1-163-161-00	CERAMIC CHIP	15PF	5%	50V
C40	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C41	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C42	1-124-907-11	ELECT	10MF	20%	50V
C43	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C44	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C45	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C46	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C48	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C49	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C50	1-163-014-00	CERAMIC CHIP	0.0027MF	10%	50V
C51	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C52	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C53	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C54	1-124-907-11	ELECT	10MF	20%	50V
C55	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C56	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C57	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C58	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C59	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C61	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C62	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C63	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C64	1-124-927-11	ELECT	4.7MF	20%	50V
C65	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C66	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C67	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C68	1-124-907-11	ELECT	10MF	20%	50V
C69	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C70	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C71	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C72	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C73	1-163-014-00	CERAMIC CHIP	0.0027MF	10%	50V
C74	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C75	1-163-131-00	CERAMIC CHIP	390PF	10%	50V
C85	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C86	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C87	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C88	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C89	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C91	1-124-907-11	ELECT	10MF	20%	50V
C92	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C93	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C94	1-124-916-11	ELECT	22MF	20%	50V
C95	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C96	1-124-916-11	ELECT	22MF	20%	50V
C97	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C98	1-124-916-11	ELECT	22MF	20%	50V
C99	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1001	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1004	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1005	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1006	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1007	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1008	1-163-038-00	CERAMIC CHIP	0.1MF		25V

Q

REF.NO.	PART NO.	DESCRIPTION		REMARK
C1009	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C1010	1-163-123-00	CERAMIC CHIP 180PF	5%	50V
C1012	1-163-097-00	CERAMIC CHIP 15PF	5%	50V
C1014	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1016	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
		<CONNECTOR>		
CN2145	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P		
		<DIODE>		
D3	8-719-047-36	DIODE BBY40		
D4	8-719-047-37	DIODE BAS16		
D5	8-719-047-37	DIODE BAS16		
D6	8-719-047-37	DIODE BAS16		
D8	8-719-047-36	DIODE BBY40		
D9	8-719-047-37	DIODE BAS16		
D10	8-719-047-36	DIODE BBY40		
D11	8-719-047-37	DIODE BAS16		
D12	8-719-047-37	DIODE BAS16		
D13	8-719-105-91	DIODE RD5.6M-B2		
D15	8-719-914-43	DIODE DAN202K		
D16	8-719-914-43	DIODE DAN202K		
		<FILTER>		
FL1	1-239-882-11	FILTER, LOW PASS		
FL2	1-236-071-11	ENCAPSULATED COMPONENT		
FL3	1-236-071-11	ENCAPSULATED COMPONENT		
FL4	1-236-071-11	ENCAPSULATED COMPONENT		
FL5	1-236-071-11	ENCAPSULATED COMPONENT		
FL6	1-236-071-11	ENCAPSULATED COMPONENT		
FL7	1-236-071-11	ENCAPSULATED COMPONENT		
FL8	1-236-071-11	ENCAPSULATED COMPONENT		
FL9	1-239-881-11	FILTER, LOW PASS		
FL10	1-239-881-11	FILTER, LOW PASS		
		<IC>		
IC1	8-759-257-59	IC TDA8755		
IC2	8-759-280-77	IC ZA2970-30DTR		
IC3	8-759-280-77	IC ZA2970-30DTR		
IC4	8-759-257-61	IC SAA4940H		
IC6	8-759-257-92	IC SAA4951		
IC7	8-759-280-00	IC P87C652FBA-AE2F01		
IC8	8-759-708-05	IC NJM78L05A		
IC9	8-759-267-23	IC MC74F08DR2		
IC10	8-759-267-23	IC MC74F08DR2		
IC11	8-759-708-05	IC NJM78L05A		
IC12	8-759-267-22	IC HEF4046BT		
IC13	8-759-234-77	IC TC4S66F		
IC14	8-759-708-05	IC NJM78L05A		
IC15	8-759-234-77	IC TC4S66F		
IC16	8-759-267-23	IC MC74F08DR2		
IC17	8-759-257-63	IC SAA7158		
IC18	8-759-708-05	IC NJM78L05A		
IC19	8-759-234-77	IC TC4S66F		
IC20	8-759-234-77	IC TC4S66F		
IC21	8-759-234-77	IC TC4S66F		
IC22	8-759-234-77	IC TC4S66F		

REF.NO.	PART NO.	DESCRIPTION				REMARK
		<COIL>				
L1	1-410-437-11	INDUCTOR	330UH			
L2	1-410-437-11	INDUCTOR	330UH			
L4	1-408-409-00	INDUCTOR	10UH			
L5	1-426-942-21	TRANSFORMER, DETECTOR				
L6	1-426-941-21	TRANSFORMER, DETECTOR				
L7	1-426-803-21	TRANSFORMER, DETECTOR				
L8	1-408-409-00	INDUCTOR	10UH			
L9	1-408-409-00	INDUCTOR	10UH			
L10	1-426-801-21	TRANSFORMER, DETECTOR				
L14	1-408-409-00	INDUCTOR	10UH			
L15	1-408-409-00	INDUCTOR	10UH			
L16	1-408-409-00	INDUCTOR	10UH			
		<TRANSISTOR>				
Q1	8-729-216-22	TRANSISTOR 2SA1162-G				
Q2	8-729-920-74	TRANSISTOR 2SC2412K-QR				
Q8	8-729-025-25	TRANSISTOR BF550				
Q9	8-729-920-74	TRANSISTOR 2SC2412K-QR				
Q10	8-729-025-25	TRANSISTOR BF550				
Q11	8-729-025-25	TRANSISTOR BF550				
Q12	8-729-216-22	TRANSISTOR 2SA1162-G				
Q13	8-729-920-74	TRANSISTOR 2SC2412K-QR				
Q14	8-729-920-74	TRANSISTOR 2SC2412K-QR				
Q16	8-729-920-74	TRANSISTOR 2SC2412K-QR				
Q17	8-729-901-01	TRANSISTOR DTC144EK				
Q18	8-729-901-01	TRANSISTOR DTC144EK				
Q20	8-729-216-22	TRANSISTOR 2SA1162-G				
Q21	8-729-216-22	TRANSISTOR 2SA1162-G				
Q22	8-729-920-74	TRANSISTOR 2SC2412K-QR				
Q24	8-729-901-01	TRANSISTOR DTC144EK				
		<JUMPER RESISTOR>				
JR10	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR11	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR12	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR13	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR14	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR15	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR16	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR17	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR18	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR19	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR20	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR21	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR22	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR23	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR24	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR25	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR26	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR27	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR28	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR30	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR31	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR32	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR33	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR34	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR35	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR36	1-216-295-00	METAL GLAZE	0	5%	1/10W	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R3	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R4	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R5	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R6	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R7	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R8	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R12	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R15	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R16	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R20	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R23	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R24	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R25	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R26	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R27	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R28	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R29	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R30	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R33	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R34	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R35	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R36	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R37	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R38	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R40	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R44	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R45	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R46	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R47	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R48	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R49	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R51	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R55	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R56	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R57	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R58	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R59	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R60	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R61	1-216-099-00	METAL GLAZE	120K	5%	1/10W	
R62	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R63	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R64	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R65	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R66	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R67	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R68	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R69	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R70	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R71	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R72	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R73	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R74	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R75	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R76	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R77	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R79	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R80	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R81	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R83	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R84	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R85	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R86	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R87	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R88	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R89	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R90	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R91	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R92	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R93	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R94	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R95	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R99	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1001	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1002	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1003	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1004	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1005	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1006	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1007	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1008	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1011	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1012	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1013	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1014	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1015	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R1016	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R1017	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1018	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R1019	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R1020	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1021	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1022	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1024	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R1027	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1028	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R1029	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1030	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1033	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1038	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1039	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1050	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1052	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1053	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1054	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1055	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1056	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1057	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1058	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1063	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1064	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1065	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R1066	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R1067	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	

<CRYSTAL>

X1	1-578-774-11	VIBRATOR, CRYSTAL	

****

A2 (KV-S2941A, S2941B, S2941D, S2941K)

*A-1630-214-A A2 BOARD, COMPLETE
****
(KV-S2941A,S2941B,S2941D,S2941K)

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
C1203	1-124-927-11	ELECT	4.7MF	20%	50V
C1204	1-124-927-11	ELECT	4.7MF	20%	50V
C1205	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C1206	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1207	1-163-014-00	CERAMIC CHIP	0.0027MF	10%	50V
C1208	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V
C1209	1-124-657-00	ELECT	10MF	20%	50V
C1210	1-124-907-11	ELECT	10MF	20%	50V
C1211	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C1212	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C1213	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1214	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C1215	1-124-910-11	ELECT	47MF	20%	50V
C1216	1-124-927-11	ELECT	4.7MF	20%	50V
C1217	1-124-927-11	ELECT	4.7MF	20%	50V
C1218	1-124-927-11	ELECT	4.7MF	20%	50V
C1219	1-124-927-11	ELECT	4.7MF	20%	50V
C1220	1-124-927-11	ELECT	4.7MF	20%	50V
C1221	1-124-927-11	ELECT	4.7MF	20%	50V
C1222	1-163-014-00	CERAMIC CHIP	0.0027MF	10%	50V
C1223	1-163-014-00	CERAMIC CHIP	0.0027MF	10%	50V
C1224	1-124-927-11	ELECT	4.7MF	20%	50V
C1225	1-124-927-11	ELECT	4.7MF	20%	50V
C1226	1-124-910-11	ELECT	47MF	20%	50V
C1227	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V
C1228	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V
C1230	1-126-101-11	ELECT	100MF	20%	16V
C1231	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1232	1-126-101-11	ELECT	100MF	20%	16V
C1233	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C1234	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1235	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1236	1-124-927-11	ELECT	4.7MF	20%	50V
C1237	1-124-927-11	ELECT	4.7MF	20%	50V
C1245	1-163-131-00	CERAMIC CHIP	390PF	10%	50V
C1246	1-163-131-00	CERAMIC CHIP	390PF	10%	50V
C1247	1-163-131-00	CERAMIC CHIP	390PF	10%	50V
C1251	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1252	1-163-010-11	CERAMIC CHIP	0.0012MF	10%	50V
C1253	1-163-014-00	CERAMIC CHIP	0.0027MF	10%	50V
C1254	1-163-014-00	CERAMIC CHIP	0.0027MF	10%	50V
C1255	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1256	1-163-022-00	CERAMIC CHIP	0.012MF	10%	50V
C1257	1-163-986-00	CERAMIC CHIP	0.027MF	10%	25V
C1258	1-163-986-00	CERAMIC CHIP	0.027MF	10%	25V
C1259	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1260	1-164-348-11	CERAMIC CHIP	0.12MF	10%	25V
C1261	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1262	1-163-010-11	CERAMIC CHIP	0.0012MF	10%	50V
C1263	1-163-014-00	CERAMIC CHIP	0.0027MF	10%	50V
C1264	1-163-014-00	CERAMIC CHIP	0.0027MF	10%	50V
C1265	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1266	1-163-022-00	CERAMIC CHIP	0.012MF	10%	50V
C1267	1-163-986-00	CERAMIC CHIP	0.027MF	10%	25V
C1268	1-163-986-00	CERAMIC CHIP	0.027MF	10%	25V
C1269	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1270	1-164-348-11	CERAMIC CHIP	0.12MF	10%	25V
C1271	1-124-916-11	ELECT	22MF	20%	50V
C1272	1-124-910-11	ELECT	47MF	20%	50V
C2201	1-164-343-11	CERAMIC CHIP	0.056MF	10%	25V
C2202	1-164-343-11	CERAMIC CHIP	0.056MF	10%	25V
C2203	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C2204	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C2205	1-124-907-11	ELECT	10MF	20%	50V
C2206	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C2207	1-137-613-11	FILM	0.0018MF	2%	100V
C2208	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C2209	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C2210	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C2211	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C2212	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C2213	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C2214	1-124-910-11	ELECT	47MF	20%	50V
C2215	1-124-910-11	ELECT	47MF	20%	50V
C2216	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V
C2217	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V
C2218	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C2219	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C2220	1-124-925-11	ELECT	2.2MF	20%	50V
C2221	1-124-925-11	ELECT	2.2MF	20%	50V
C2222	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C2223	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C2224	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C2225	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C2226	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C2227	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C2228	1-124-925-11	ELECT	2.2MF	20%	50V
C2229	1-124-925-11	ELECT	2.2MF	20%	50V
C2230	1-136-177-00	FILM	1MF	5%	50V
C2231	1-136-177-00	FILM	1MF	5%	50V
C2232	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C2233	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C2234	1-124-907-11	ELECT	10MF	20%	50V
C2235	1-124-907-11	ELECT	10MF	20%	50V
C2236	1-124-478-11	ELECT	100MF	20%	25V
C2237	1-124-478-11	ELECT	100MF	20%	25V
C2238	1-136-165-00	FILM	0.1MF	5%	50V
C2239	1-136-165-00	FILM	0.1MF	5%	50V

<CONNECTOR>

CN2201	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P

<DIODE>

D1201	8-719-914-43	DIODE DAN202K
D2201	8-719-914-42	DIODE DA204K

<IC>

IC1201	8-759-145-58	IC UPC4558C
IC1202	8-759-145-58	IC UPC4558C
IC1203	8-759-145-58	IC UPC4558C
IC1204	8-759-503-59	IC YM7128
IC1251	8-759-257-64	IC TDA7317
IC2201	8-759-267-97	IC TDA6812-5
IC2202	8-759-502-21	IC TDA2822M

<JUMPER RESISTOR>

JR2201	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR2202	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR2205	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR2206	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR2207	1-216-296-91	METAL GLAZE	0	5%	1/8W

A2 (KV-S2941A, S2941B, S2941D, S2941K)

REF.NO.	PART NO.	DESCRIPTION				REMARK
JR2208	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR2209	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR2210	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR2211	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR2212	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR2213	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR2214	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR2215	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR2216	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR2217	1-216-296-91	METAL GLAZE	0	5%	1/8W	

<COIL>

REF.NO.	PART NO.	DESCRIPTION		REMARK
L1201	1-408-421-00	INDUCTOR	100UH	
L1202	1-408-421-00	INDUCTOR	100UH	
L1251	1-408-421-00	INDUCTOR	100UH	
L2201	1-407-500-00	INDUCTOR	4.7MMH	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION		REMARK
Q1201	8-729-920-74	TRANSISTOR	2SC2412K-QR	
Q1202	8-729-920-74	TRANSISTOR	2SC2412K-QR	
Q1251	8-729-901-01	TRANSISTOR	DTC144EK	
Q1252	8-729-901-01	TRANSISTOR	DTC144EK	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1201	1-216-103-91	METAL GLAZE	180K	5%	1/10W	
R1202	1-216-107-00	METAL GLAZE	270K	5%	1/10W	
R1203	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1204	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R1205	1-216-103-91	METAL GLAZE	180K	5%	1/10W	
R1206	1-216-107-00	METAL GLAZE	270K	5%	1/10W	
R1207	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1208	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R1209	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R1210	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1211	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1212	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1213	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1214	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1215	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1216	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1217	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1218	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R1219	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1220	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1221	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1222	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1223	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1224	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1225	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1226	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1227	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1228	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1229	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1230	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1231	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1232	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1233	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1234	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1235	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1236	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1237	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1238	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	

A2 (KV-S2943E, S2942U)

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1240	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1241	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1242	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1243	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1245	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1246	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1247	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1251	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1252	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1253	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1254	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1255	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1256	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1257	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1258	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1259	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1260	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1261	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1262	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1263	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1264	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1265	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1266	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1267	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1268	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1269	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1270	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1271	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1272	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1290	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2201	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W	
R2202	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W	
R2203	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W	
R2204	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W	
R2205	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R2206	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R2207	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R2208	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R2209	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R2210	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2211	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2216	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R2217	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R2218	1-249-389-11	CARBON	4.7	5%	1/4W	F
R2219	1-249-389-11	CARBON	4.7	5%	1/4W	F
R2220	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R2221	1-216-091-00	METAL GLAZE	56K	5%	1/10W	

<CRYSTAL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
X1201	1-567-307-11	OSCILLATOR, CRYSTAL	

****

*A-1630-215-A A2 BOARD, COMPLETE (KV-S2943E)
****

*A-1630-216-A A2 BOARD, COMPLETE (KV-S2942U)
****

<FILTER>

REF.NO.	PART NO.	DESCRIPTION	REMARK
BP1101	1-236-238-11	FILTER, BAND PASS (KV-S2942U)	
BP1101	1-239-047-11	FILTER, BAND PASS (KV-S2943E)	

A2 (KV-S2943E, S2942U)

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C1101	1-126-101-11	ELECT	100MF	20%	16V	
C1102	1-126-101-11	ELECT	100MF	20%	16V	
C1103	1-163-077-91	CERAMIC CHIP	0.1MF		50V	
C1104	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V	
C1105	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V	
C1106	1-163-383-11	CERAMIC CHIP	180PF	5%	50V	
C1107	1-163-205-00	CERAMIC CHIP	0.001MF	10%	50V	
C1108	1-163-059-00	CERAMIC CHIP	0.01MF		50V	
C1109	1-163-033-00	CERAMIC CHIP	0.022MF		50V	
C1110	1-164-336-11	CERAMIC CHIP	0.33MF		25V	
C1111	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C1112	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V	
C1113	1-124-477-11	ELECT	47MF	20%	16V	
C1114	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C1115	1-124-477-11	ELECT	47MF	20%	16V	
C1116	1-106-228-00	MYLAR	0.22MF	10%	100V	
C1117	1-164-222-11	CERAMIC CHIP	0.22MF		25V	
C1118	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	
C1119	1-163-129-00	CERAMIC CHIP	330PF	5%	50V	
C1120	1-163-129-00	CERAMIC CHIP	330PF	5%	50V	
C1121	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	
C1122	1-163-081-00	CERAMIC CHIP	0.22MF		25V	
C1123	1-106-228-00	MYLAR	0.22MF	10%	100V	
C1124	1-124-477-11	ELECT	47MF	20%	16V	
C1125	1-124-477-11	ELECT	47MF	20%	16V	
C1126	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1127	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C1128	1-124-477-11	ELECT	47MF	20%	16V	
C1129	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C1130	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C1131	1-163-059-00	CERAMIC CHIP	0.01MF		50V	
C1132	1-163-077-91	CERAMIC CHIP	0.1MF		50V	
C1133	1-124-907-11	ELECT	10MF	20%	50V	
C1134	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C1135	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C1136	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C1137	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C1138	1-163-105-00	CERAMIC CHIP	33PF	5%	50V	
C1139	1-163-105-00	CERAMIC CHIP	33PF	5%	50V	
C1140	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C1141	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V	
C1142	1-163-057-00	CERAMIC CHIP	0.0068MF		50V	
C1143	1-163-003-11	CERAMIC CHIP	330PF	10%	50V	
C1144	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	
C1145	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	
C1146	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C1147	1-124-477-11	ELECT	47MF	20%	16V	
C1148	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V	
C1149	1-124-477-11	ELECT	47MF	20%	16V	
C1150	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C1151	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C1152	1-124-477-11	ELECT	47MF	20%	16V	
C1153	1-163-087-00	CERAMIC CHIP	4PF	0.25PF	50V	
C1154	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C1155	1-124-477-11	ELECT	47MF	20%	16V	
C1156	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C1157	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C1158	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C1159	1-163-243-11	CERAMIC CHIP	47PF	5%	50V	(KV-S2942U)
C1203	1-124-927-11	ELECT	4.7MF	20%	50V	
C1204	1-124-927-11	ELECT	4.7MF	20%	50V	
C1205	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C1206	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1207	1-163-014-00	CERAMIC CHIP	0.0027MF	10%	50V	
C1208	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V	
C1209	1-124-657-00	ELECT	10MF	20%	50V	
C1210	1-124-907-11	ELECT	10MF	20%	50V	
C1211	1-163-101-00	CERAMIC CHIP	22PF	5%	50V	
C1212	1-163-101-00	CERAMIC CHIP	22PF	5%	50V	
C1213	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1214	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V	
C1215	1-124-910-11	ELECT	47MF	20%	50V	
C1216	1-124-927-11	ELECT	4.7MF	20%	50V	
C1217	1-124-927-11	ELECT	4.7MF	20%	50V	
C1218	1-124-927-11	ELECT	4.7MF	20%	50V	
C1219	1-124-927-11	ELECT	4.7MF	20%	50V	
C1220	1-124-927-11	ELECT	4.7MF	20%	50V	
C1221	1-124-927-11	ELECT	4.7MF	20%	50V	
C1222	1-163-014-00	CERAMIC CHIP	0.0027MF	10%	50V	
C1223	1-163-014-00	CERAMIC CHIP	0.0027MF	10%	50V	
C1224	1-124-927-11	ELECT	4.7MF	20%	50V	
C1225	1-124-927-11	ELECT	4.7MF	20%	50V	
C1226	1-124-910-11	ELECT	47MF	20%	50V	
C1227	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V	
C1228	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V	
C1230	1-126-101-11	ELECT	100MF	20%	16V	
C1231	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C1232	1-126-101-11	ELECT	100MF	20%	16V	
C1233	1-164-505-11	CERAMIC CHIP	2.2MF		16V	
C1234	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C1235	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C1236	1-124-927-11	ELECT	4.7MF	20%	50V	
C1237	1-124-927-11	ELECT	4.7MF	20%	50V	
C1245	1-163-131-00	CERAMIC CHIP	390PF	10%	50V	
C1246	1-163-131-00	CERAMIC CHIP	390PF	10%	50V	
C1247	1-163-131-00	CERAMIC CHIP	390PF	10%	50V	
C1251	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C1252	1-163-010-11	CERAMIC CHIP	0.0012MF	10%	50V	
C1253	1-163-014-00	CERAMIC CHIP	0.0027MF	10%	50V	
C1254	1-163-014-00	CERAMIC CHIP	0.0027MF	10%	50V	
C1255	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C1256	1-163-022-00	CERAMIC CHIP	0.012MF	10%	50V	
C1257	1-163-986-00	CERAMIC CHIP	0.027MF	10%	25V	
C1258	1-163-986-00	CERAMIC CHIP	0.027MF	10%	25V	
C1259	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1260	1-164-348-11	CERAMIC CHIP	0.12MF	10%	25V	
C1261	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C1262	1-163-010-11	CERAMIC CHIP	0.0012MF	10%	50V	
C1263	1-163-014-00	CERAMIC CHIP	0.0027MF	10%	50V	
C1264	1-163-014-00	CERAMIC CHIP	0.0027MF	10%	50V	
C1265	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C1266	1-163-022-00	CERAMIC CHIP	0.012MF	10%	50V	
C1267	1-163-986-00	CERAMIC CHIP	0.027MF	10%	25V	
C1268	1-163-986-00	CERAMIC CHIP	0.027MF	10%	25V	
C1269	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1270	1-164-348-11	CERAMIC CHIP	0.12MF	10%	25V	
C1271	1-124-916-11	ELECT	22MF	20%	50V	
C1272	1-124-910-11	ELECT	47MF	20%	50V	
C2201	1-164-343-11	CERAMIC CHIP	0.056MF	10%	25V	
C2202	1-164-343-11	CERAMIC CHIP	0.056MF	10%	25V	
C2203	1-164-005-11	CERAMIC CHIP	0.47MF		25V	
C2204	1-164-005-11	CERAMIC CHIP	0.47MF		25V	
C2205	1-124-907-11	ELECT	10MF	20%	50V	
C2206	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V	

REF.NO.	PART NO.	DESCRIPTION			REMARK
C2207	1-137-613-11	FILM	0.0018MF	2%	100V
C2208	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C2209	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C2210	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C2211	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C2212	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C2213	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C2214	1-124-910-11	ELECT	47MF	20%	50V
C2215	1-124-910-11	ELECT	47MF	20%	50V
C2216	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V
C2217	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V
C2218	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C2219	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C2220	1-124-925-11	ELECT	2.2MF	20%	50V
C2221	1-124-925-11	ELECT	2.2MF	20%	50V
C2222	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C2223	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C2224	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C2225	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C2226	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C2227	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C2228	1-124-925-11	ELECT	2.2MF	20%	50V
C2229	1-124-925-11	ELECT	2.2MF	20%	50V
C2230	1-136-177-00	FILM	1MF	5%	50V
C2231	1-136-177-00	FILM	1MF	5%	50V
C2232	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C2233	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C2234	1-124-907-11	ELECT	10MF	20%	50V
C2235	1-124-907-11	ELECT	10MF	20%	50V
C2236	1-124-478-11	ELECT	100MF	20%	25V
C2237	1-124-478-11	ELECT	100MF	20%	25V
C2238	1-136-165-00	FILM	0.1MF	5%	50V
C2239	1-136-165-00	FILM	0.1MF	5%	50V

<TRAP CERAMIC>

CF1101	1-409-333-00	TRAP, CERAMIC (6.0MHZ) (KV-S2942U)
CF1102	1-404-134-00	TRAP, CERAMIC (5.5MHZ) (KV-S2943E)

<CONNECTOR>

CN2201	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P

<DIODE>

D1101	8-719-914-43	DIODE DAN202K
D1102	8-719-027-70	DIODE 1SV217-TPH3
D1103	8-719-820-71	DIODE 1SV214
D1201	8-719-914-43	DIODE DAN202K
D2201	8-719-914-42	DIODE DA204K

<FERRITE BEAD>

FB1101	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB1104	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB1105	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH

<IC>

REF.NO.	PART NO.	DESCRIPTION
IC1101	8-759-511-88	IC TDA8732
IC1102	8-759-184-28	IC SAA7282-ZP
IC1201	8-759-145-58	IC UPC4558C
IC1202	8-759-145-58	IC UPC4558C
IC1203	8-759-145-58	IC UPC4558C
IC1204	8-759-503-59	IC YM7128
IC1251	8-759-257-64	IC TDA7317
IC2201	8-759-267-97	IC TDA6812-5
IC2202	8-759-502-21	IC TDA2822M

<JUMPER RESISTOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
JR1101	1-216-296-91	METAL GLAZE	0	5%	1/8W (KV-S2943E)
JR2205	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR2206	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR2207	1-216-296-91	METAL GLAZE	0	5%	1/8W
JR2208	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR2209	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR2210	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR2211	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR2212	1-216-296-91	METAL GLAZE	0	5%	1/8W
JR2213	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR2214	1-216-296-91	METAL GLAZE	0	5%	1/8W
JR2215	1-216-296-91	METAL GLAZE	0	5%	1/8W
JR2216	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR2217	1-216-296-91	METAL GLAZE	0	5%	1/8W

<COIL>

L1101	1-408-405-00	INDUCTOR	4.7UH	
L1102	1-408-405-00	INDUCTOR	4.7UH	
L1103	1-410-119-11	INDUCTOR	1MMH	
L1104	1-410-119-11	INDUCTOR	1MMH	
L1105	1-408-411-00	INDUCTOR	15UH	(KV-S2942U)
L1201	1-408-421-00	INDUCTOR	100UH	
L1202	1-408-421-00	INDUCTOR	100UH	
L1251	1-408-421-00	INDUCTOR	100UH	
L2201	1-407-500-00	INDUCTOR	4.7MMH	

<TRANSISTOR>

Q1101	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1102	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1103	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1104	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1105	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1106	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1107	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1108	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1201	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1202	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1251	8-729-901-01	TRANSISTOR DTC144EK
Q1252	8-729-901-01	TRANSISTOR DTC144EK

<RESISTOR>

R1101	1-216-039-00	METAL GLAZE	390	5%	1/10W
R1102	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R1103	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R1104	1-216-041-00	METAL GLAZE	470	5%	1/10W
R1105	1-216-005-00	METAL GLAZE	15	5%	1/10W
R1106	1-216-036-00	METAL GLAZE	300	5%	1/10W
R1107	1-216-042-00	METAL GLAZE	510	5%	1/10W
R1108	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W
R1109	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R1110	1-216-047-00	METAL GLAZE	820	5%	1/10W
R1111	1-216-041-00	METAL GLAZE	470	5%	1/10W
R1112	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R1113	1-216-001-00	METAL GLAZE	10	5%	1/10W

A2

(KV-S2943E, S2942U)

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1114	1-216-105-00	METAL GLAZE	220K	5%	1/10W	
R1115	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R1116	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1117	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1118	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1119	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1120	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R1121	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1122	1-216-158-00	METAL GLAZE	22	5%	1/8W	
R1123	1-216-158-00	METAL GLAZE	22	5%	1/8W	
R1124	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1125	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1126	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R1127	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1128	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1129	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1130	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1131	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R1132	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1133	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1134	1-216-212-00	METAL GLAZE	3.9K	5%	1/8W	
R1135	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1136	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1137	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R1138	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1139	1-216-005-00	METAL GLAZE	15	5%	1/10W	
R1140	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R1141	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R1142	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1143	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1144	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1145	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R1146	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1147	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1148	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1149	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R1150	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1151	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1152	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1153	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1154	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1201	1-216-103-91	METAL GLAZE	180K	5%	1/10W	
R1202	1-216-107-00	METAL GLAZE	270K	5%	1/10W	
R1203	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1204	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R1205	1-216-103-91	METAL GLAZE	180K	5%	1/10W	
R1206	1-216-107-00	METAL GLAZE	270K	5%	1/10W	
R1207	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1208	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R1209	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R1210	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1211	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1212	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1213	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1214	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1215	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1216	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1217	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1218	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R1219	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1220	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1221	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1222	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1223	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1224	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1225	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1226	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1227	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1228	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1229	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1230	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1231	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1232	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1233	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1234	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1235	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1236	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1237	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1238	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1240	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1241	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1242	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1243	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1245	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1246	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1247	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1251	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1252	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1253	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1254	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1255	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1256	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1257	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1258	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1259	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1260	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1261	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1262	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1263	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1264	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1265	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1266	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1267	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1268	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1269	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1270	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1271	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1272	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1290	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2201	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W	
R2202	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W	
R2203	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W	
R2204	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W	
R2205	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R2206	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R2207	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R2208	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R2209	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R2210	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2211	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2216	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R2217	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R2218	1-249-389-11	CARBON	4.7	5%	1/4W	F
R2219	1-249-389-11	CARBON	4.7	5%	1/4W	F
R2220	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R2221	1-216-091-00	METAL GLAZE	56K	5%	1/10W	

<CRYSTAL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
X1101	1-579-689-21	VIBRATOR, CRYSTAL	
X1102	1-579-282-21	VIBRATOR, CRYSTAL	(KV-S2943E)
X1102	1-579-283-11	VIBRATOR, CRYSTAL	(KV-S2942U)
X1201	1-567-307-11	OSCILLATOR, CRYSTAL	

****

*A-1632-172-A A BOARD, COMPLETE
****
(KV-S2941A,S2941D,S2943E,S2941K)

*A-1632-187-A A BOARD, COMPLETE (KV-S2941B)
****

*A-1632-188-A A BOARD, COMPLETE (KV-S2942U)
****

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
C071	1-126-803-11	ELECT	47MF	20%	10V
C072	1-124-120-11	ELECT	220MF	20%	16V
C073	1-126-101-11	ELECT	100MF	20%	16V
C074	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C103	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C104	1-124-910-11	ELECT	47MF	20%	50V
C105	1-124-916-11	ELECT	22MF	20%	50V
C106	1-124-927-11	ELECT	4.7MF	20%	50V
C110	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C120	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C208	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C217	1-124-925-11	ELECT	2.2MF	20%	50V
C218	1-124-925-11	ELECT	2.2MF	20%	50V
C231	1-164-346-11	CERAMIC CHIP	1MF		16V
C232	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C233	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C234	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C235	1-130-772-00	FILM	0.22MF	5%	63V
C236	1-124-618-11	ELECT	2200MF	20%	35V
C237	1-124-618-11	ELECT	2200MF	20%	35V
C238	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C239	1-130-772-00	FILM	0.22MF	5%	63V
C240	1-124-916-11	ELECT	22MF	20%	50V
C241	1-124-916-11	ELECT	22MF	20%	50V
C242	1-124-903-11	ELECT	1MF	20%	50V
C244	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C248	1-163-185-00	CERAMIC CHIP	150PF	5%	50V
C249	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C250	1-124-910-11	ELECT	47MF	20%	50V
C280	1-126-320-11	ELECT	10MF	20%	16V
C290	1-162-638-11	CERAMIC CHIP	1MF		16V
C682	1-126-101-11	ELECT	100MF	20%	16V
C683	1-124-478-11	ELECT	100MF	20%	25V
C684	1-126-101-11	ELECT	100MF	20%	16V
C685	1-124-478-11	ELECT	100MF	20%	25V
C1351	1-164-346-11	CERAMIC CHIP	1MF		16V
C1352	1-164-346-11	CERAMIC CHIP	1MF		16V
C1353	1-164-346-11	CERAMIC CHIP	1MF		16V
C1354	1-164-346-11	CERAMIC CHIP	1MF		16V
C1355	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C1356	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1357	1-124-120-11	ELECT	220MF	20%	16V
C1358	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C1359	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C1360	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1362	1-124-927-11	ELECT	4.7MF	20%	50V
C1363	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1364	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C1365	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1366	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C1368	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1370	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C1373	1-164-336-11	CERAMIC CHIP	0.33MF		25V
C1374	1-124-903-11	ELECT	1MF	20%	50V
C1375	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1376	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1378	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C1379	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1380	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1381	1-124-903-11	ELECT	1MF	20%	50V
C1382	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1383	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C1384	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C1385	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1386	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1387	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1390	1-163-001-11	CERAMIC CHIP	220PF	10%	50V

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN105	*1-568-882-51	PIN, CONNECTOR 7P	
CN0001	*1-564-520-11	PLUG, CONNECTOR 5P	
CN0101	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P	
CN0102	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P	
CN0103	*1-564-513-11	PLUG, CONNECTOR 10P	
CN0104	1-564-511-11	PLUG, CONNECTOR 8P	
CN0106	*1-568-880-51	PIN, CONNECTOR 5P	(KV-S2941B)
CN0107	*1-568-879-11	PIN, CONNECTOR 4P	
CN0109	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P	
CN0110	*1-568-882-51	PIN, CONNECTOR 7P	
CN0113	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P	
CN0119	*1-568-880-51	PIN, CONNECTOR 5P	
CN0145	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P	
CN0146	*1-564-514-11	PLUG, CONNECTOR 11P	
CN0150	*1-568-881-51	PIN, CONNECTOR 6P	
CN0151	*1-568-879-11	PIN, CONNECTOR 4P	

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D068	8-719-914-44	DIODE DAP202K	
D069	8-719-914-44	DIODE DAP202K	
D071	8-719-109-89	DIODE RD5.6ESB2	
D073	8-719-109-89	DIODE RD5.6ESB2	
D075	8-719-914-43	DIODE DAN202K	
D077	8-719-914-43	DIODE DAN202K	
D078	8-719-109-89	DIODE RD5.6ESB2	
D079	8-719-109-89	DIODE RD5.6ESB2	
D101	8-719-982-27	DIODE MTZJ-33C	
D206	8-719-914-43	DIODE DAN202K	
D207	8-719-901-33	DIODE 1SS133	
D208	8-719-901-33	DIODE 1SS133	
D209	8-719-901-33	DIODE 1SS133	
D210	8-719-901-33	DIODE 1SS133	
D211	8-719-901-33	DIODE 1SS133	
D212	8-719-901-33	DIODE 1SS133	
D213	8-719-914-43	DIODE DAN202K	
D215	8-719-914-42	DIODE DA204K	
D216	8-719-914-42	DIODE DA204K	

A

REF.NO.	PART NO.	DESCRIPTION	REMARK
D681	8-719-914-44	DIODE DAP202K	
D682	8-719-110-03	DIODE RD7.5ESB2	
D683	8-719-109-89	DIODE RD5.6ESB2	
D1351	8-719-901-33	DIODE 1SS133	
D1352	8-719-914-43	DIODE DAN202K	
D1353	8-719-914-43	DIODE DAN202K	
D1354	8-719-914-43	DIODE DAN202K	
D1355	8-719-914-43	DIODE DAN202K	
D1356	8-719-914-43	DIODE DAN202K	
D1357	8-719-914-43	DIODE DAN202K	
D1358	8-719-914-43	DIODE DAN202K	
D1359	8-719-914-43	DIODE DAN202K	
		<IC>	
IC072	8-759-184-27	IC ST24C16CB1	
IC251	8-759-072-99	IC TDA2052	
	4-201-023-01	SPACER, INSULATING; IC251	
	4-202-373-01	SPRING, IC; IC251	
	4-812-134-00	RIVET NYLON, 3.5; IC251	
IC261	8-759-072-99	IC TDA2052	
	4-201-023-01	SPACER, INSULATING; IC261	
	4-202-373-01	SPRING, IC; IC261	
	4-812-134-00	RIVET NYLON, 3.5; IC261	
IC681	8-749-921-21	IC SI-3120C	
	4-382-854-11	SCREW (M3X10), P, SW (+); IC681	
IC682	8-749-920-43	IC SI-3050CA	
	4-382-854-11	SCREW (M3X10), P, SW (+); IC682	
IC684	8-759-701-59	IC NJM78M09FA	
	*4-368-683-21	SPRING, TRANSISTOR; IC684	
IC685	8-759-510-52	IC TEA7605	
IC1351	8-759-275-36	IC TDA4780	
IC1352	8-759-007-21	IC UPD4053BC	
IC1353	8-759-145-58	IC UPC4558C	
IC1354	8-759-103-93	IC UPC393	
		<IF BLOCK>	
IFB101	1-466-733-11	IF BLOCK (IFH-389) (KV-S2941A,S2941D,S2943E,S2941K)	
IFB101	1-466-734-11	IF BLOCK (IFH-395) (KV-S2942U)	
IFB101	1-466-735-11	IF BLOCK (IFH-389F) (KV-S2941B)	
		<JUMPER RESISTOR>	
JR110	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR111	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR113	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR114	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR271	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR272	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR1351	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR1352	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR1353	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR1355	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR1356	1-216-295-00	METAL GLAZE 0 5% 1/10W (KV-S2941A,S2941D,S2943E,S2941K)	
JR1357	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR1358	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR1359	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR1360	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR1361	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR1362	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR1363	1-216-296-91	METAL GLAZE 0 5% 1/8W	

REF.NO.	PART NO.	DESCRIPTION	REMARK
		<COIL>	
L101	1-412-546-41	INDUCTOR 560UH	
L1351	1-216-295-00	METAL GLAZE 0 5% 1/10W	
L1352	1-216-295-00	METAL GLAZE 0 5% 1/10W	
L1353	1-408-403-00	INDUCTOR 3.3UH	
L1354	1-408-403-00	INDUCTOR 3.3UH	
L1355	1-408-403-00	INDUCTOR 3.3UH	
		<TRANSISTOR>	
Q071	8-729-901-00	TRANSISTOR DTC124EK	
Q101	8-729-216-22	TRANSISTOR 2SA1162-G	
Q102	8-729-901-00	TRANSISTOR DTC124EK	
Q103	8-729-901-00	TRANSISTOR DTC124EK	
Q105	8-729-216-22	TRANSISTOR 2SA1162-G	
Q107	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q108	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q201	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q202	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q203	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q204	8-729-216-22	TRANSISTOR 2SA1162-G	
Q205	8-729-216-22	TRANSISTOR 2SA1162-G	
Q206	8-729-216-22	TRANSISTOR 2SA1162-G	
Q207	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q209	8-729-216-22	TRANSISTOR 2SA1162-G	
Q210	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q681	8-729-140-96	TRANSISTOR 2SD774-34	
Q682	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q683	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1351	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1358	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1359	8-729-931-02	TRANSISTOR 2SC2413K-Q	
Q1360	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1361	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1362	8-729-900-53	TRANSISTOR DTC114EK	
Q1363	8-729-920-74	TRANSISTOR 2SC2412K-QR	
		<RESISTOR>	
R071	1-249-413-11	CARBON 470 5% 1/4W	
R072	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R073	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R074	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R076	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R077	1-216-025-00	METAL GLAZE 100 5% 1/10W (KV-S2941A,S2941B,S2941D,S2943E,S2941K)	
R101	1-216-025-00	METAL GLAZE 100 5% 1/10W (KV-S2941A,S2941B,S2941D,S2943E,S2941K)	
R102	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R103	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R105	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R108	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R109	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R110	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R111	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R115	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R116	1-215-901-00	METAL OXIDE 33K 5% 2W	F
R117	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R118	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R119	1-216-025-00	METAL GLAZE 100 5% 1/10W (KV-S2941A,S2941B,S2941D,S2943E,S2941K)	
R123	1-216-295-00	METAL GLAZE 0 5% 1/10W	

A

REF.NO.	PART NO.	DESCRIPTION				REMARK
R201	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R202	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R210	1-247-734-11	CARBON	39	5%	1/2W	
R211	1-247-734-11	CARBON	39	5%	1/2W	
R212	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R213	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R214	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R215	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R216	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R217	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R218	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R221	1-211-771-71	FUSIBLE	4.7	5%	1/4W	F
R222	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R223	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R224	1-249-433-11	CARBON	22K	5%	1/4W	
R225	1-211-771-71	FUSIBLE	4.7	5%	1/4W	F
R226	1-249-412-11	CARBON	390	5%	1/4W	
R227	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R228	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R229	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R230	1-216-246-91	METAL GLAZE	100K	5%	1/8W	
R231	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R232	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R233	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R234	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R235	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R236	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R239	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R241	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R242	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R244	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R245	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R246	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R247	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R248	1-216-025-00	METAL GLAZE	100	5%	1/10W	
		(KV-S2941A,S2941B,S2941D,S2943E,S2941K)				
R250	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R251	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R252	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R253	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R254	1-216-252-00	METAL GLAZE	180K	5%	1/8W	
R255	1-216-252-00	METAL GLAZE	180K	5%	1/8W	
R256	1-247-807-31	CARBON	100	5%	1/4W	
R257	1-247-807-31	CARBON	100	5%	1/4W	
R258	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R259	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R260	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R294	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R295	1-216-027-00	METAL GLAZE	120	5%	1/10W	
R296	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R623	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R685	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R691	1-249-417-11	CARBON	1K	5%	1/4W	F
R692	1-216-385-11	METAL OXIDE	0.47	5%	3W	F
R693	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R694	1-216-471-71	METAL OXIDE	27	5%	3W	F
R695	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R696	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R697	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1354	1-216-025-00	METAL GLAZE	100	5%	1/10W	
		(KV-S2941A,S2941B,S2941D,S2943E,S2941K)				
R1355	1-216-171-00	METAL GLAZE	75	5%	1/8W	
R1356	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R1357	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1358	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1359	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R1360	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1362	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1363	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1364	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R1365	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R1366	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R1367	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R1368	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R1369	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1370	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R1371	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1372	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1373	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1374	1-247-897-11	CARBON	560K	5%	1/4W	
R1375	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1376	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1377	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1378	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1379	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1380	1-216-099-00	METAL GLAZE	120K	5%	1/10W	
R1381	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1382	1-216-101-00	METAL GLAZE	150K	5%	1/10W	
R1383	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1384	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1385	1-216-025-00	METAL GLAZE	100	5%	1/10W	
		(KV-S2941A,S2941B,S2941D,S2943E,S2941K)				
R1386	1-216-025-00	METAL GLAZE	100	5%	1/10W	
		(KV-S2941A,S2941B,S2941D,S2943E,S2941K)				
R1387	1-216-025-00	METAL GLAZE	100	5%	1/10W	
		(KV-S2941A,S2941B,S2941D,S2943E,S2941K)				
R1388	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R1389	1-216-025-00	METAL GLAZE	100	5%	1/10W	
		(KV-S2941A,S2941B,S2941D,S2943E,S2941K)				
R1390	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R1391	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1392	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1393	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1394	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R1395	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1396	1-216-689-11	METAL GLAZE	39K	5%	1/10W	
R1397	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1399	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R2301	1-216-025-00	METAL GLAZE	100	5%	1/10W	
		(KV-S2941A,S2941B,S2941D,S2943E,S2941K)				
R2302	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R2303	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R2304	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R2305	1-216-683-11	METAL CHIP	22K	0.50%	1/10W	
R2306	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W	
R2307	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2308	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2309	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2310	1-216-683-11	METAL CHIP	22K	0.50%	1/10W	
R2311	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2313	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2314	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R2316	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R2318	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R2320	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R2321	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R2322	1-216-023-00	METAL GLAZE	82	5%	1/10W	

A IF (KV-S2941A, S2941D, S2943E, S2941K)

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION	REMARK
R2361	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	

<VARIABLE RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
RV101	1-241-760-21	RES, ADJ, CERMET 470	

<TUNER>

REF.NO.	PART NO.	DESCRIPTION	REMARK
TU101⚠	1-693-184-11	TUNER (UP44C) (KV-S2942U)	
TU101⚠	1-693-185-11	TUNER (UV916H) (KV-S2941A,S2941B,S2941D,S2943E,S2941K)	

****

1-466-733-11 IF BLOCK (IFH-389)
****
(KV-S2941A,S2941D,S2943E,S2941K)

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
C101	1-163-121-00	CERAMIC CHIP 150PF 5% 50V	
C102	1-164-222-11	CERAMIC CHIP 0.22MF 25V	
C103	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C104	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C105	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C106	1-124-477-11	ELECT 47MF 20% 16V	
C107	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C108	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C109	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C112	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C113	1-163-101-00	CERAMIC CHIP 22PF 5% 50V	
C114	1-124-477-11	ELECT 47MF 20% 16V	
C115	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C116	1-164-346-11	CERAMIC CHIP 1MF 16V	
C118	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C119	1-163-369-11	CERAMIC CHIP 47PF 5% 50V	
C121	1-163-235-11	CERAMIC CHIP 22PF 5% 50V	
C122	1-163-239-11	CERAMIC CHIP 33PF 5% 50V	
C123	1-163-235-11	CERAMIC CHIP 22PF 5% 50V	
C124	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C130	1-216-295-00	METAL GLAZE 0 5% 1/10W	
C131	1-163-093-00	CERAMIC CHIP 10PF 5% 50V	
C133	1-124-477-11	ELECT 47MF 20% 16V	
C152	1-164-337-11	CERAMIC CHIP 2.2MF 16V	
C153	1-164-337-11	CERAMIC CHIP 2.2MF 16V	
C154	1-164-337-11	CERAMIC CHIP 2.2MF 16V	
C155	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C156	1-124-477-11	ELECT 47MF 20% 16V	
C161	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C162	1-164-222-11	CERAMIC CHIP 0.22MF 25V	
C163	1-164-346-11	CERAMIC CHIP 1MF 16V	
C164	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C165	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C166	1-124-477-11	ELECT 47MF 20% 16V	
C167	1-163-213-00	CERAMIC CHIP 0.0022MF 5% 50V	
C168	1-164-346-11	CERAMIC CHIP 1MF 16V	
C170	1-124-477-11	ELECT 47MF 20% 16V	
C171	1-124-477-11	ELECT 47MF 20% 16V	
C172	1-124-477-11	ELECT 47MF 20% 16V	
C173	1-124-477-11	ELECT 47MF 20% 16V	

<FILTER>

REF.NO.	PART NO.	DESCRIPTION	REMARK
CF2	1-527-839-00	FILTER, CERAMIC	
CF3	1-527-840-00	FILTER, CERAMIC	
CF4	1-567-570-11	FILTER, CERAMIC	
SWF1	1-579-658-11	FILTER, SAWTOOTH WAVE	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN1	1-750-173-11	PIN, CONNECTOR (PC BOARD) 10P	
CN2	1-750-173-11	PIN, CONNECTOR (PC BOARD) 10P	

<TRIMMER>

REF.NO.	PART NO.	DESCRIPTION	REMARK
CT1	1-404-801-11	TRAP, CERAMIC	

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D161	8-719-400-18	DIODE MA152WK	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC1	8-759-070-76	IC M52308SP	
IC2	8-759-070-71	IC TDA9820	
IC3	8-759-514-54	IC BA7046	

<COIL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
L101	1-408-421-00	INDUCTOR 100UH	
L102	1-408-419-00	INDUCTOR 68UH	
L103	1-408-419-00	INDUCTOR 68UH	
L104	1-408-408-00	INDUCTOR 8.2UH	
L121	1-408-413-00	INDUCTOR 22UH	
L122	1-408-420-00	INDUCTOR 82UH	
L142	1-410-790-41	INDUCTOR 0.56UH	
L151	1-408-419-00	INDUCTOR 68UH	
L161	1-408-419-00	INDUCTOR 68UH	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q101	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q102	8-729-216-22	TRANSISTOR 2SA1162-G	
Q121	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q122	8-729-216-22	TRANSISTOR 2SA1162-G	
Q161	8-729-216-22	TRANSISTOR 2SA1162-G	
Q170	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q171	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q172	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q173	8-729-120-28	TRANSISTOR 2SC1623-L5L6	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
JR2	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR3	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR4	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR7	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR8	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR9	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR11	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR14	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR16	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR18	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR19	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR20	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR21	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR23	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR24	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR25	1-216-296-00	METAL GLAZE 0 5% 1/8W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
JR29	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR30	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR33	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR38	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR39	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR40	1-216-296-00	METAL GLAZE	0	5%	1/8W	
R101	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R102	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R103	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R104	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R106	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R107	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R108	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R110	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R113	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R114	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R115	1-216-027-00	METAL GLAZE	120	5%	1/10W	
R116	1-216-101-00	METAL GLAZE	150K	5%	1/10W	
R117	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R118	1-216-117-00	METAL GLAZE	680K	5%	1/10W	
R119	1-216-240-00	METAL GLAZE	56K	5%	1/8W	
R120	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R121	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R122	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R123	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R124	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R125	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R127	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R130	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R131	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R132	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R133	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R134	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R135	1-216-198-00	METAL GLAZE	1K	5%	1/8W	
R150	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R151	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R152	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R153	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R154	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R155	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R156	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R157	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R159	1-216-107-00	METAL GLAZE	270K	5%	1/10W	
R160	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R161	1-218-755-11	METAL CHIP	130K	0.50%	1/10W	
R162	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R163	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R164	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R165	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R166	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R167	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R168	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R169	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R170	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R171	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R172	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R173	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R174	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R175	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R176	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R177	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R178	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R179	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R180	1-216-037-00	METAL GLAZE	330	5%	1/10W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R181	1-216-037-00	METAL GLAZE	330	5%	1/10W	

<VARIABLE RESISTOR>

RV1	1-241-121-11	RES, ADJ, CARBON 4.7K

<TRANSFORMER>

T4	1-416-017-21	COIL
T5	1-416-018-21	COIL

****

1-466-734-11 IF BLOCK (IFH-395) (KV-S2942U)
****

<CAPACITOR>

C101	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C102	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C103	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C104	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C105	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C106	1-124-477-11	ELECT	47MF	20%	16V
C107	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C108	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C109	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C112	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C113	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C114	1-124-477-11	ELECT	47MF	20%	16V
C115	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C116	1-164-346-11	CERAMIC CHIP	1MF		16V
C118	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C119	1-163-369-11	CERAMIC CHIP	47PF	5%	50V
C122	1-163-093-00	CERAMIC CHIP	10PF	5%	50V
C130	1-216-295-00	METAL GLAZE	0	5%	1/10W
C131	1-163-224-11	CERAMIC CHIP	7PF	0.25PF	50V
C133	1-124-477-11	ELECT	47MF	20%	16V
C161	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C162	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C163	1-164-346-11	CERAMIC CHIP	1MF		16V
C164	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C165	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C166	1-124-477-11	ELECT	47MF	20%	16V
C167	1-163-213-00	CERAMIC CHIP	0.0022MF	5%	50V
C168	1-164-346-11	CERAMIC CHIP	1MF		16V
C170	1-124-477-11	ELECT	47MF	20%	16V
C171	1-124-477-11	ELECT	47MF	20%	16V

<FILTER>

CD1	1-579-657-21	DISCRIMINATOR, CERAMIC
CF1	1-567-569-11	FILTER, CERAMIC
SWF1	1-579-659-11	FILTER, SAWTOOTH WAVE

<CONNECTOR>

CN1	1-750-173-11	PIN, CONNECTOR (PC BOARD) 10P
CN2	1-750-173-11	PIN, CONNECTOR (PC BOARD) 10P

<TRIMMER>

CT1	1-409-333-00	TRAP, CERAMIC (6.0MHZ)

IF (KV-S2942U) **IF** (KV-S2941B)

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D161	8-719-400-18	DIODE MA152WK	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC1	8-759-070-76	IC M52308SP	
IC3	8-759-514-54	IC BA7046	

<COIL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
L101	1-408-414-00	INDUCTOR 27UH	
L102	1-408-419-00	INDUCTOR 68UH	
L103	1-408-419-00	INDUCTOR 68UH	
L104	1-408-406-00	INDUCTOR 5.6UH	
L105	1-408-410-00	INDUCTOR 12UH	
L142	1-410-790-41	INDUCTOR 0.56UH	
L161	1-408-419-00	INDUCTOR 68UH	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q101	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q102	8-729-216-22	TRANSISTOR 2SA1162-G	
Q122	8-729-216-22	TRANSISTOR 2SA1162-G	
Q161	8-729-216-22	TRANSISTOR 2SA1162-G	
Q172	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q173	8-729-120-28	TRANSISTOR 2SC1623-L5L6	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
JR1	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR2	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR3	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR4	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR7	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR8	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR9	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR10	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR11	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR12	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR13	1-163-093-00	CERAMIC CHIP 10PF 5% 50V	
JR14	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR16	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR18	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR19	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR20	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR21	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR23	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR24	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR25	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR29	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR30	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR33	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR38	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR39	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR40	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR41	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR42	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR101	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R101	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R102	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R103	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R104	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W	
R105	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R106	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R107	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R108	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R110	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R112	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R113	1-216-031-00	METAL GLAZE 180 5% 1/10W	
R114	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R115	1-216-031-00	METAL GLAZE 180 5% 1/10W	
R116	1-216-101-00	METAL GLAZE 150K 5% 1/10W	
R117	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R118	1-216-117-00	METAL GLAZE 680K 5% 1/10W	
R119	1-216-240-00	METAL GLAZE 56K 5% 1/8W	
R120	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R121	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R122	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R123	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R130	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R131	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R132	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W	
R133	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R134	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R135	1-216-198-00	METAL GLAZE 1K 5% 1/8W	
R153	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R159	1-216-107-00	METAL GLAZE 270K 5% 1/10W	
R160	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R161	1-218-755-11	METAL CHIP 130K 0.50% 1/10W	
R162	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R163	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R164	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R165	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R166	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R167	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R168	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R169	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R175	1-216-083-00	METAL GLAZE 27K 5% 1/10W	
R176	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R177	1-216-095-00	METAL GLAZE 82K 5% 1/10W	
R178	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R179	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R181	1-216-037-00	METAL GLAZE 330 5% 1/10W	

<VARIABLE RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
RV1	1-241-121-11	RES, ADJ, CARBON 4.7K	

<TRANSFORMER>

REF.NO.	PART NO.	DESCRIPTION	REMARK
T4	1-416-017-21	COIL	
T5	1-416-018-21	COIL	

****

1-466-735-11 IF BLOCK (IFH-389F) (KV-S2941B)

****

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
C1	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C2	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C3	1-124-903-11	ELECT 1MF 20% 50V	
C4	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C5	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C6	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C7	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	

REF.NO.	PART NO.	DESCRIPTION			REMARK
C8	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C9	1-124-916-11	ELECT	22MF	20%	25V
C10	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C11	1-124-477-11	ELECT	47MF	20%	16V
C13	1-163-059-00	CERAMIC CHIP	0.01MF	10%	50V
C14	1-124-477-11	ELECT	47MF	20%	16V
C15	1-124-903-11	ELECT	1MF	20%	50V
C16	1-163-061-00	CERAMIC CHIP	0.015MF	10%	50V
C17	1-162-638-11	CERAMIC CHIP	1MF		16V
C18	1-162-638-11	CERAMIC CHIP	1MF		16V
C19	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C20	1-124-902-00	ELECT	0.47MF	20%	50V
C21	1-124-903-11	ELECT	1MF	20%	50V
C22	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C23	1-124-902-00	ELECT	0.47MF	20%	50V
C24	1-164-506-11	CERAMIC CHIP	4.7MF		16V
C25	1-124-477-11	ELECT	47MF	20%	16V
C26	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C27	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C28	1-124-477-11	ELECT	47MF	20%	16V
C33	1-124-907-11	ELECT	10MF	20%	50V
C34	1-124-907-11	ELECT	10MF	20%	50V
C35	1-124-925-11	ELECT	2.2MF	20%	50V
C36	1-124-477-11	ELECT	47MF	20%	16V
C37	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C38	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C40	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C71	1-124-477-11	ELECT	47MF	20%	16V
C72	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C80	1-124-477-11	ELECT	47MF	20%	16V
C83	1-124-477-11	ELECT	47MF	20%	16V
C84	1-124-477-11	ELECT	47MF	20%	16V
C85	1-124-477-11	ELECT	47MF	20%	16V
C86	1-124-477-11	ELECT	47MF	20%	16V
C87	1-124-477-11	ELECT	47MF	20%	16V
C91	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C95	1-164-337-11	CERAMIC CHIP	2.2MF		16V
C101	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C102	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C104	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C105	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C106	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C121	1-126-176-11	ELECT	220MF	20%	10V
C122	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C131	1-126-099-11	ELECT	2.2MF	20%	35V

<FILTER>

REF.NO.	PART NO.	DESCRIPTION	REMARK
CF1	1-527-839-00	FILTER, CERAMIC	
CF2	1-567-569-11	FILTER, CERAMIC	
CF3	1-527-840-00	FILTER, CERAMIC	
CF4	1-567-570-11	FILTER, CERAMIC	
SWF1	1-579-662-11	FILTER, SURFACE WAVE	
SWF3	1-404-711-11	SAWF	
SWF4	1-579-660-11	FILTER, SAWTOOTH WAVE	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN1	1-750-173-11	PIN, CONNECTOR (PC BOARD) 10P	
CN2	1-750-173-11	PIN, CONNECTOR (PC BOARD) 10P	

<TRIMMER>

REF.NO.	PART NO.	DESCRIPTION	REMARK
CT1	1-404-801-11	TRAP, CERAMIC	
CT2	1-409-429-11	TRAP, CERAMIC	
CV1	1-141-245-00	CAP, TRIMMER	
CV2	1-141-245-00	CAP, TRIMMER	
CV3	1-141-304-21	TRIMMER, CERAMIC	

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D7	8-719-421-57	DIODE MA73-TX	
D8	8-719-421-57	DIODE MA73-TX	
D9	8-719-421-57	DIODE MA73-TX	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC1	8-759-070-75	IC M52312SP	
IC2	8-759-070-71	IC TDA9820	
IC3	8-759-979-62	IC PCF8574	

<COIL>

REF.NO.	PART NO.	DESCRIPTION		REMARK
L1	1-408-419-00	INDUCTOR	68UH	
L2	1-408-419-00	INDUCTOR	68UH	
L3	1-408-407-00	INDUCTOR	6.8UH	
L4	1-408-419-00	INDUCTOR	68UH	
L5	1-408-419-00	INDUCTOR	68UH	
L7	1-408-406-00	INDUCTOR	5.6UH	
L9	1-408-419-00	INDUCTOR	68UH	
L71	1-408-419-00	INDUCTOR	68UH	
L101	1-408-399-00	INDUCTOR	1.5UH	
L121	1-408-407-00	INDUCTOR	6.8UH	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q1	8-729-907-06	TRANSISTOR BF199-AMMO	
Q4	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q5	8-729-115-10	TRANSISTOR 2SK105A-10	
Q6	8-729-900-52	TRANSISTOR DTC114YK	
Q7	8-729-216-22	TRANSISTOR 2SA1162-G	
Q8	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q10	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q11	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q12	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q13	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q14	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q15	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q16	8-729-216-22	TRANSISTOR 2SA1162-G	
Q101	8-729-104-80	TRANSISTOR 2SC3355	
Q121	8-729-120-28	TRANSISTOR 2SC1623-L5L6	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
JR2	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR3	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR5	1-216-296-00	METAL GLAZE	0	5%	1/8W
R1	1-216-025-00	METAL GLAZE	100	5%	1/10W
R2	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R4	1-216-041-00	METAL GLAZE	470	5%	1/10W
R5	1-216-021-00	METAL GLAZE	68	5%	1/10W
R6	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R8	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R9	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R10	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R11	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R24	1-216-280-00	METAL GLAZE	2.7M	5%	1/8W
R25	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W

IF (KV-S2941B) M3

REF.NO.	PART NO.	DESCRIPTION				REMARK
R26	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R27	1-216-266-00	METAL GLAZE	680K	5%	1/8W	
R28	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R29	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R30	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R31	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R32	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R33	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R34	1-216-252-00	METAL GLAZE	180K	5%	1/8W	
R35	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R36	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R37	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R38	1-216-099-00	METAL GLAZE	120K	5%	1/10W	
R39	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R40	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R42	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R43	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R44	1-216-027-00	METAL GLAZE	120	5%	1/10W	
R45	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R46	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R47	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R48	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R49	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R53	1-216-082-00	METAL GLAZE	24K	5%	1/10W	
R54	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R55	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R56	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R57	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R58	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R59	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R60	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R61	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R63	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R71	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R72	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R73	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R74	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R75	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R76	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R77	1-216-174-00	METAL GLAZE	100	5%	1/8W	
R81	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R82	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R83	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R84	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R85	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R86	1-216-689-11	METAL GLAZE	39K	5%	1/10W	
R87	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R88	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R89	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R90	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R91	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R92	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R93	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R94	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R95	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R96	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R97	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R98	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R99	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R100	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R102	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R103	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R104	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R105	1-216-033-00	METAL GLAZE	220	5%	1/10W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R121	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R122	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R123	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R124	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R125	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R301	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R302	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R303	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R304	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R305	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R306	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R307	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R308	1-216-037-00	METAL GLAZE	330	5%	1/10W	

<VARIABLE RESISTOR>

RV2	1-241-120-11	RES, ADJ, CARBON 2.2K

<TRANSFORMER>

T1	1-404-806-21	COIL
T3	1-416-012-11	COIL
T4	1-416-012-11	COIL
T5	1-402-720-11	COIL

<CRYSTAL>

X1	1-579-648-21	VIBRATOR, CERAMIC

****

*A-1635-018-A M3 BOARD, COMPLETE
****

<CAPACITOR>

C001	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C002	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C003	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C004	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C007	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C008	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C010	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C011	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C012	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C014	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C016	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C017	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C018	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C019	1-124-916-11	ELECT	22MF	20%	50V
C020	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C022	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C023	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C024	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C025	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C026	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C032	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C042	1-162-638-11	CERAMIC CHIP	1MF		16V
C081	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C2001	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C2002	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C2003	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C2004	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C2005	1-163-038-00	CERAMIC CHIP	0.1MF		25V

REF.NO.	PART NO.	DESCRIPTION				REMARK
C2008	1-164-222-11	CERAMIC CHIP	0.22MF		25V	
C2010	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C2016	1-164-222-11	CERAMIC CHIP	0.22MF		25V	
C2017	1-164-222-11	CERAMIC CHIP	0.22MF		25V	
C2019	1-124-916-11	ELECT	22MF	20%	50V	
C2020	1-164-222-11	CERAMIC CHIP	0.22MF		25V	
C2021	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	
C2024	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C2025	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C2027	1-164-222-11	CERAMIC CHIP	0.22MF		25V	
C2029	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	
C2031	1-163-031-11	CERAMIC CHIP	0.01MF		50V	

<VIBRATOR CERAMIC>

REF.NO.	PART NO.	DESCRIPTION
CD001	1-579-126-11	VIBRATOR, CERAMIC

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
CN1413	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P
CN1432	1-564-511-11	PLUG, CONNECTOR 8P

<DIODE>

REF.NO.	PART NO.	DESCRIPTION
D001	8-719-027-82	DIODE MA3039H-TX
D2001	8-719-036-58	DIODE MA3030-H(TX)
D2007	8-719-027-81	DIODE MA3027H-TX

<IC>

REF.NO.	PART NO.	DESCRIPTION
IC001	8-759-168-52	IC SDA30C162-GEG
IC002	8-759-278-59	IC TMS27PC010A15FMAE250
	1-750-797-11	SOCKET, PLCC; IC002
IC2002	8-759-262-58	IC SDA5273P-C22-GEG
IC2003	8-759-188-60	IC MB81C4256A-70PSZG

<JUMPER RESISTOR>

REF.NO.	PART NO.	DESCRIPTION			
JR2002	1-216-295-00	METAL GLAZE	0	5%	1/10W

<COIL>

REF.NO.	PART NO.	DESCRIPTION	
L001	1-408-421-00	INDUCTOR	100UH
L2001	1-410-674-31	INDUCTOR	82UH
L2002	1-410-397-21	FERRITE BEAD INDUCTOR	1.1UH

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION
Q002	8-729-216-22	TRANSISTOR 2SA1162-G
Q2002	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q2004	8-729-901-00	TRANSISTOR DTC124EK
Q2005	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q2006	8-729-901-01	TRANSISTOR DTC144EK
Q2008	8-729-901-00	TRANSISTOR DTC124EK

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R001	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R002	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R003	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R004	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R005	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R007	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R008	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R010	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R011	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R012	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R013	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R014	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R016	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R017	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R018	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R019	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R020	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R021	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R022	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R023	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R024	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R025	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R026	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R032	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R033	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R034	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R035	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R038	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R049	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R050	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R051	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R052	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R054	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R057	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R060	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R067	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R068	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R069	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R081	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R082	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R083	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R084	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2001	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R2003	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R2004	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R2005	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R2007	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2008	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2009	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R2010	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2011	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R2012	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R2013	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R2014	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R2015	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R2022	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2023	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R2024	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R2025	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R2026	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R2028	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R2030	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2031	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R2032	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2036	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2037	1-216-049-00	METAL GLAZE	1K	5%	1/10W	

<CRYSTAL>

REF.NO.	PART NO.	DESCRIPTION
X2001	1-579-965-21	VIBRATOR, CRYSTAL

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

G

****

*A-1636-004-A G BOARD, COMPLETE
****

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
C601	1-136-165-00	FILM	0.1MF	5%	50V
C603	1-164-644-11	CERAMIC	330PF	10%	500V
C604	1-164-644-11	CERAMIC	330PF	10%	500V
C605	1-136-481-11	FILM	0.0022MF	2%	50V
C607	1-124-927-11	ELECT	4.7MF	20%	50V
C608	1-126-337-11	ELECT	22MF	20%	50V
C609	1-127-530-11	ELECT(SOLID)	22MF	20%	20V
C610	1-137-479-11	FILM	1MF	10%	400V
C611	1-130-777-00	FILM	0.1MF	5%	63V
C612	1-124-903-11	ELECT	1MF	20%	50V
C613	1-124-907-11	ELECT	10MF	20%	50V
C615	1-126-337-11	ELECT	22MF	20%	50V
C616	1-164-493-11	CERAMIC CHIP	0.047MF	10%	50V
C617	1-164-493-11	CERAMIC CHIP	0.047MF	10%	50V
C641	1-106-367-00	MYLAR	0.01MF	10%	400V
C650	1-124-618-11	ELECT	2200MF	20%	35V
C651	1-124-618-11	ELECT	2200MF	20%	35V
C654	1-107-892-91	ELECT	4700MF	20%	25V
C655	1-107-880-91	ELECT	4700MF	20%	10V
C656	1-164-644-11	CERAMIC	330PF	10%	500V
C657	1-107-995-11	ELECT	100MF	0	160V
C658	1-124-917-11	ELECT	33MF	20%	50V
C659	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C661	⚠1-136-527-12	FILM	0.47MF	20%	300V
C662	⚠1-136-415-51	FILM	0.33MF	20%	300V
C663	1-106-343-00	MYLAR	0.001MF	10%	100V
C664	1-102-002-00	CERAMIC	680PF	10%	500V
C666	1-124-479-11	ELECT	330MF	20%	25V
C667	1-126-337-11	ELECT	22MF	20%	50V
C668	1-124-122-11	ELECT	100MF	20%	50V
C670	1-137-218-11	FILM	0.012MF	5%	0
C671	1-137-218-11	FILM	0.012MF	5%	0
C672	⚠1-162-599-12	CERAMIC	0.0047MF		250V
C673	⚠1-162-599-12	CERAMIC	0.0047MF		250V
C674	1-125-555-11	ELECT	330MF	20%	400V
C675	1-124-910-11	ELECT	47MF	20%	50V
C676	1-162-599-12	CERAMIC	0.0047MF		250V
C678	⚠1-161-742-00	CERAMIC	0.0022MF	20%	400V
C680	⚠1-161-742-00	CERAMIC	0.0022MF	20%	400V
C681	1-126-337-11	ELECT	22MF	20%	50V
C682	1-124-120-11	ELECT	220MF	20%	25V

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
CN0005	1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P
CN0006	1-695-915-11	TAB (CONTACT)
CN0007	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P
CN0905	*1-568-882-51	PIN, CONNECTOR 7P
CN0931	⚠*1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P
CN0947	*1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P

<DIODE>

REF.NO.	PART NO.	DESCRIPTION
D602	8-719-979-58	DIODE EGP10D
D603	8-719-110-49	DIODE RD18ESB2
D604	8-719-110-49	DIODE RD18ESB2
D605	8-719-901-33	DIODE 1SS133
D606	8-719-110-49	DIODE RD18ESB2
D607	8-719-979-58	DIODE EGP10D
D608	8-719-110-49	DIODE RD18ESB2
D610	8-719-983-38	DIODE MTZJ-T-77-36B
D611	8-719-979-58	DIODE EGP10D
D612	8-719-914-43	DIODE DAN202K
D613	8-719-914-43	DIODE DAN202K
D614	8-719-510-48	DIODE D1N20R
D615	8-719-914-43	DIODE DAN202K
D616	8-719-510-48	DIODE D1N20R
D651	8-719-047-31	DIODE RBA-402L
D653	8-719-312-47	DIODE RBA-406B
	4-382-854-11	SCREW (M3X10), P, SW (+); D653
D655	8-719-047-31	DIODE RBA-402L
D657	8-719-914-43	DIODE DAN202K
D658	8-719-510-48	DIODE D1N20R
D661	8-719-901-33	DIODE 1SS133
D662	8-719-914-43	DIODE DAN202K
D663	8-719-510-53	DIODE D4SB60L
D664	8-719-109-89	DIODE RD5.6ESB2
D670	8-719-979-58	DIODE EGP10D

<FERRITE BEAD>

REF.NO.	PART NO.	DESCRIPTION
FB603	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH
FB604	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH
FB605	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH
FB654	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH
FB655	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH

<IC>

REF.NO.	PART NO.	DESCRIPTION
IC601	8-759-266-38	IC MC34025P
IC602	8-759-185-47	IC IR2112
IC603	8-749-923-44	IC SFH617G-1
IC604	8-759-908-15	IC TL431CLP
IC605	8-759-013-10	IC MC7815CT
IC610	⚠1-810-051-11	POWER MODULE DM-48

<JUMPER RESISTOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
JR651	1-216-296-91	METAL GLAZE	0	5%	1/8W
JR652	1-216-296-91	METAL GLAZE	0	5%	1/8W

<COIL>

REF.NO.	PART NO.	DESCRIPTION	
L601	1-412-525-21	INDUCTOR	10UH
L602	1-412-525-21	INDUCTOR	10UH
L603	1-412-525-21	INDUCTOR	10UH
L604	1-412-525-21	INDUCTOR	10UH
L650	1-412-525-21	INDUCTOR	10UH
L651	⚠1-412-525-21	INDUCTOR	10UH

<LINE FILTER>

REF.NO.	PART NO.	DESCRIPTION
LF661	1-424-436-11	TRANSFORMER, LINE FILTER

<IC LINK>

REF.NO.	PART NO.	DESCRIPTION
PS601	⚠1-532-686-91	LINK, IC 2.7A
PS602	⚠1-532-686-91	LINK, IC 2.7A
PS603	⚠1-532-686-91	LINK, IC 2.7A

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

G **C**

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q601	8-729-216-22	TRANSISTOR 2SA1162-G	
Q602	8-729-025-19	TRANSISTOR IRFI740G	
	4-382-854-11	SCREW (M3X10), P, SW (+); IC602	
Q603	8-729-025-19	TRANSISTOR IRFI740G	
	4-382-854-11	SCREW (M3X10), P, SW (+); IC603	
Q604	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q605	8-729-216-22	TRANSISTOR 2SA1162-G	
Q606	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q607	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q608	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q610	8-729-216-22	TRANSISTOR 2SA1162-G	
Q652	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q653	8-729-216-22	TRANSISTOR 2SA1162-G	
Q661	8-729-920-74	TRANSISTOR 2SC2412K-QR	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R601	1-216-444-11	METAL OXIDE	82K	5%	1W	F
R602	1-216-444-11	METAL OXIDE	82K	5%	1W	F
R603	1-216-444-11	METAL OXIDE	82K	5%	1W	F
R604	1-216-660-11	METAL CHIP	2.4K	0.50%	1/10W	
R605	1-216-236-11	METAL GLAZE	39K	5%	1/8W	
R606	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W	
R607	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R608	1-249-393-11	CARBON	10	5%	1/4W	
R609	1-249-389-11	CARBON	4.7	5%	1/4W	F
R610	1-215-880-00	METAL OXIDE	10	5%	2W	F
R611	1-249-393-11	CARBON	10	5%	1/4W	
R612	1-249-389-11	CARBON	4.7	5%	1/4W	F
R613	1-211-968-11	WIREWOUND	0.56	10%	5W	F
R614	1-215-880-00	METAL OXIDE	10	5%	2W	F
R616	1-216-222-00	METAL GLAZE	10K	5%	1/8W	
R617	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R618	1-216-222-00	METAL GLAZE	10K	5%	1/8W	
R619	1-216-254-00	METAL GLAZE	220K	5%	1/8W	
R620	1-216-198-91	METAL GLAZE	1K	5%	1/8W	
R621	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R625	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R626	1-216-186-00	METAL GLAZE	330	5%	1/8W	
R628	1-249-441-11	CARBON	100K	5%	1/4W	
R632	1-249-441-11	CARBON	100K	5%	1/4W	
R633	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R634	1-216-186-00	METAL GLAZE	330	5%	1/8W	
R635	1-215-442-00	METAL	7.5K	1%	1/4W	
R636	1-215-431-00	METAL	2.7K	1%	1/4W	
R637	1-247-807-31	CARBON	100	5%	1/4W	
R638	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R639	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R640	1-249-417-11	CARBON	1K	5%	1/4W	F
R641	1-247-903-00	CARBON	1M	5%	1/4W	
R642	1-247-903-00	CARBON	1M	5%	1/4W	
R643	1-216-691-11	METAL CHIP	47K	0.50%	1/10W	
R651	1-215-880-00	METAL OXIDE	10	5%	2W	F
R658	1-249-415-11	CARBON	680	5%	1/4W	
R660	1-207-905-00	WIREWOUND	0.27	10%	2W	F
R662	1-249-427-11	CARBON	6.8K	5%	1/4W	
R663	1-249-424-11	CARBON	3.9K	5%	1/4W	F
R664	⚠1-205-998-11	WIREWOUND	1	5%	10W	
R665	⚠1-218-265-11	METAL GLAZE	8.2M	5%	1W	
R667	1-249-430-11	CARBON	12K	5%	1/4W	
R668	1-249-436-11	CARBON	39K	5%	1/4W	
R669	⚠1-205-998-11	WIREWOUND	1	5%	10W	
R670	⚠1-205-998-11	WIREWOUND	1	5%	10W	
R671	⚠1-214-937-00	CARBON	1M	5%	1/2W	
R673	1-215-429-00	METAL	2.2K	1%	1/4W	
R678	1-249-417-11	CARBON	1K	5%	1/4W	F
R679	1-216-198-91	METAL GLAZE	1K	5%	1/8W	
R680	1-249-417-11	CARBON	1K	5%	1/4W	F
R681	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R682	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R683	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R684	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R685	1-249-417-11	CARBON	1K	5%	1/4W	
R686	1-216-352-11	METAL OXIDE	1.8	5%	1W	F
R687	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R688	1-216-105-00	METAL GLAZE	220K	5%	1/10W	
R689	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R690	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R691	1-249-419-11	CARBON	1.5K	5%	1/4W	F

<RELAY>

REF.NO.	PART NO.	DESCRIPTION
RY661	⚠1-515-720-31	RELAY

<TRANSFORMER>

REF.NO.	PART NO.	DESCRIPTION
T650	⚠1-426-863-11	TRANSFORMER, CONVERTER (PIT)

<THERMISTOR>

REF.NO.	PART NO.	DESCRIPTION
THP661	⚠1-809-827-11	THERMISTOR, POSITIVE

`*************************************************************`

*A-1638-044-A C BOARD, COMPLETE
`*****************`

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			
C701	1-126-383-11	ELECT	0.33MF	20%	315V
C702	1-126-383-11	ELECT	0.33MF	20%	315V
C703	1-126-383-11	ELECT	0.33MF	20%	315V
C704	1-102-129-00	CERAMIC	0.01MF	10%	50V
C705	1-124-120-11	ELECT	220MF	20%	16V
C706	1-124-120-11	ELECT	220MF	20%	16V
C708	1-124-120-11	ELECT	220MF	20%	16V
C709	1-102-157-00	CERAMIC	560PF	10%	500V
C710	1-102-157-00	CERAMIC	560PF	10%	500V
C711	1-102-157-00	CERAMIC	560PF	10%	500V
C712	1-124-927-11	ELECT	4.7MF	20%	50V
C713	1-162-116-00	CERAMIC	680PF	10%	2KV
C714	1-162-115-00	CERAMIC	330PF	10%	2KV
C716	1-162-116-00	CERAMIC	680PF	10%	2KV
C717	1-102-129-00	CERAMIC	0.01MF	10%	50V
C718	1-102-129-00	CERAMIC	0.01MF	10%	50V
C719	1-164-346-11	CERAMIC CHIP	1MF		16V
C720	1-126-326-51	ELECT	10MF	20%	250V

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
CN0004	1-695-915-11	TAB (CONTACT)
CN0403	*1-564-513-11	PLUG, CONNECTOR 10P
CN0421	*1-508-767-00	PIN, CONNECTOR (5MM PITCH) 5P

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D701	8-719-901-33	DIODE 1SS133	
D702	8-719-901-83	DIODE 1SS83	
D703	8-719-901-83	DIODE 1SS83	
D704	8-719-901-83	DIODE 1SS83	
D705	8-719-901-33	DIODE 1SS133	
D706	8-719-901-33	DIODE 1SS133	
D707	8-719-901-33	DIODE 1SS133	
D710	8-719-901-33	DIODE 1SS133	
D712	8-719-921-69	DIODE NTZJ-9.1	
D714	8-719-921-88	DIODE MTZJ-13B	
D715	8-719-911-19	DIODE 1SS119	
D716	8-719-911-19	DIODE 1SS119	
D717	8-719-911-19	DIODE 1SS119	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC703	8-759-073-90	IC TDA6111Q	
	4-382-854-11	SCREW (M3X10), P, SW (+); IC703	
IC704	8-759-073-90	IC TDA6111Q	
	4-382-854-11	SCREW (M3X10), P, SW (+); IC704	
IC705	8-759-073-90	IC TDA6111Q	
	4-382-854-11	SCREW (M3X10), P, SW (+); IC705	

<SOCKET>

REF.NO.	PART NO.	DESCRIPTION	REMARK
J701 ⚠	1-526-990-13	SOCKET, PICTURE TUBE	

<COIL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
L701	1-410-671-31	INDUCTOR 47UH	
L704	1-408-405-00	INDUCTOR 4.7UH	
L705	1-408-405-00	INDUCTOR 4.7UH	
L706	1-408-405-00	INDUCTOR 4.7UH	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q701	8-729-255-12	TRANSISTOR 2SC2551-0	
Q702	8-729-255-12	TRANSISTOR 2SC2551-0	
Q703	8-729-255-12	TRANSISTOR 2SC2551-0	
Q704	8-729-216-22	TRANSISTOR 2SA1162-G	
Q705	8-729-901-06	TRANSISTOR DT144EK	
Q706	8-729-920-74	TRANSISTOR 2SC2412K-QR	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
R701	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R702	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R703	1-249-435-11	CARBON 33K 5% 1/4W	
R704	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
R705	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R706	1-249-433-11	CARBON 22K 5% 1/4W	
R707	1-249-433-11	CARBON 22K 5% 1/4W	
R708	1-249-433-11	CARBON 22K 5% 1/4W	
R709	1-249-416-11	CARBON 820 5% 1/4W	
R710	1-216-047-00	METAL GLAZE 820 5% 1/10W	
R711	1-216-047-00	METAL GLAZE 820 5% 1/10W	
R712	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R713	1-249-417-11	CARBON 1K 5% 1/4W	
R714	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R715	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R716	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R717	1-249-417-11	CARBON 1K 5% 1/4W	
R718	1-249-417-11	CARBON 1K 5% 1/4W	
R719	1-249-417-11	CARBON 1K 5% 1/4W	
R720	1-215-926-00	METAL OXIDE 33K 5% 3W	F
R721	1-215-926-00	METAL OXIDE 33K 5% 3W	F
R722	1-215-926-00	METAL OXIDE 33K 5% 3W	F
R723	1-249-408-11	CARBON 180 5% 1/4W	
R724	1-249-408-11	CARBON 180 5% 1/4W	
R725	1-249-408-11	CARBON 180 5% 1/4W	
R726	1-202-565-81	SOLID 470 20% 1/2W	
R727	1-202-565-81	SOLID 470 20% 1/2W	
R728	1-202-565-81	SOLID 470 20% 1/2W	
R729	1-249-424-11	CARBON 3.9K 5% 1/4W	
R730	1-249-424-11	CARBON 3.9K 5% 1/4W	
R731	1-249-424-11	CARBON 3.9K 5% 1/4W	
R732	1-202-549-00	SOLID 100 20% 1/2W	
R733	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R734	1-202-549-00	SOLID 100 20% 1/2W	
R735	1-216-047-00	METAL GLAZE 820 5% 1/10W	
R741	1-202-884-11	SOLID 820K 20% 1/2W	
R743	1-202-884-11	SOLID 820K 20% 1/2W	
R744	1-202-842-11	SOLID 220K 20% 1/2W	
R750	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R751	1-216-091-00	METAL GLAZE 56K 5% 1/10W	
R752	1-249-417-11	CARBON 1K 5% 1/4W	F
R753	1-215-911-11	METAL OXIDE 100 5% 3W	F

<VARIABLE RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M	
RV704	1-241-656-11	RES, ADJ, METAL FILM 110M	

****

*A-1640-125-A D6 BOARD, COMPLETE
****

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
C2541	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C2542	1-163-037-11	CERAMIC CHIP 0.022MF 10% 25V	
C2543	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C2544	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C2545	1-164-222-11	CERAMIC CHIP 0.22MF 25V	
C2546	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2547	1-163-020-00	CERAMIC CHIP 0.0082MF 10% 50V	
C2548	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C2549	1-163-989-11	CERAMIC CHIP 0.033MF 10% 25V	
C2550	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C2551	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C2554	1-163-011-11	CERAMIC CHIP 0.0015MF 10% 50V	
C2560	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C2563	1-163-031-11	CERAMIC CHIP 0.01MF 50V	
C2564	1-163-031-11	CERAMIC CHIP 0.01MF 50V	
C2565	1-163-031-11	CERAMIC CHIP 0.01MF 50V	
C2566	1-163-031-11	CERAMIC CHIP 0.01MF 50V	
C2567	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C2568	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C2569	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C2570	1-164-336-11	CERAMIC CHIP 0.33MF 25V	
C2573	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C2583	1-124-477-11	ELECT 47MF 20% 25V	
C2590	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C2591	1-163-989-11	CERAMIC CHIP 0.033MF 10% 25V	
C2592	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	

REF.NO.	PART NO.	DESCRIPTION	REMARK
C2599	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
		<CONNECTOR>	
CN2044*	1-573-299-11	CONNECTOR, BOARD TO BOARD 10P	
CN2050*	1-568-881-51	PIN, CONNECTOR 6P	
		<DIODE>	
D2551	8-719-914-44	DIODE DAP202K	
		<IC>	
IC2561	8-752-347-92	IC CXD2018Q	
IC2562	8-759-998-98	IC LM358D	
IC2563	8-759-708-05	IC NJM78L05A	
IC2581	8-759-998-98	IC LM358D	
		<JUMPER RESISTOR>	
JR2553	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR2554	1-216-295-00	METAL GLAZE 0 5% 1/10W	
		<COIL>	
L2561	1-408-409-00	INDUCTOR 10UH	
L2562	1-408-409-00	INDUCTOR 10UH	
		<TRANSISTOR>	
Q2565	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q2566	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q2590	8-729-216-22	TRANSISTOR 2SA1162-G	
		<RESISTOR>	
R2540	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R2541	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2542	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R2543	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R2544	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R2547	1-216-657-11	METAL CHIP 1.8K 0.50% 1/10W	
R2548	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R2549	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
R2550	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W	
R2551	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2552	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R2553	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R2554	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2555	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R2561	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R2564	1-216-091-00	METAL GLAZE 56K 5% 1/10W	
R2565	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R2566	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2567	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R2568	1-216-109-00	METAL GLAZE 330K 5% 1/10W	
R2575	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R2576	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2581	1-216-659-11	METAL CHIP 2.2K 0.50% 1/10W	
R2582	1-216-665-11	METAL CHIP 3.9K 0.50% 1/10W	
R2583	1-216-659-11	METAL CHIP 2.2K 0.50% 1/10W	
R2584	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
R2585	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
R2586	1-216-667-11	METAL CHIP 4.7K 0.50% 1/10W	

REF.NO.	PART NO.	DESCRIPTION	REMARK
R2587	1-208-812-11	METAL CHIP 18K 0.50% 1/10W	
R2589	1-216-659-11	METAL CHIP 2.2K 0.50% 1/10W	
R2591	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R2592	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R2593	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R2594	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R2595	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R2596	1-216-103-91	METAL GLAZE 180K 5% 1/10W	
R2597	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2599	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2600	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R2601	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2602	1-216-105-00	METAL GLAZE 220K 5% 1/10W	

****

*A-1640-143-A D7 BOARD, COMPLETE

****

		<CAPACITOR>	
C2701	1-124-907-11	ELECT 10MF 20% 50V	
C2702	1-124-477-11	ELECT 47MF 20% 25V	
C2703	1-124-477-11	ELECT 47MF 20% 25V	
		<CONNECTOR>	
CN2701*	1-564-506-11	PLUG, CONNECTOR 3P	
CN2702*	1-564-506-11	PLUG, CONNECTOR 3P	
		<DIODE>	
D2701	8-719-914-44	DIODE DAP202K	
		<IC>	
IC2701	8-759-603-37	IC M5216P	
IC2702	8-759-701-59	IC NJM78M09FA	
		<JUMPER RESISTOR>	
JR2751	1-216-296-91	METAL GLAZE 0 5% 1/8W	
		<TRANSISTOR>	
Q2701	8-729-920-74	TRANSISTOR 2SC2412K-QR	
		<RESISTOR>	
R2701	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R2702	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R2703	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R2704	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R2705	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2706	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2707	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R2708	1-216-073-00	METAL GLAZE 10K 5% 1/10W	

****

*A-1642-110-A D BOARD, COMPLETE

****

<CAPACITOR>

D

REF.NO.	PART NO.	DESCRIPTION			REMARK
C801	1-124-347-00	ELECT	100MF	20%	160V
C802	1-136-207-11	FILM	0.047MF	10%	250V
C803	1-102-212-00	CERAMIC	820PF	10%	500V
C804	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C807	1-162-115-00	CERAMIC	330PF	10%	2KV
C808	1-162-116-00	CERAMIC	680PF	10%	2KV
C809	1-162-116-00	CERAMIC	680PF	10%	2KV
C810	1-137-102-11	FILM	0.022MF	10%	250V
C811	1-109-948-11	CAP, FILM 15000PF			
C812	1-136-315-61	FILM	0.047MF	5%	630V
C813	0-551-837-00	CAP, PP FILM			
C814	1-129-702-00	FILM	0.001MF	10%	400V
C815	1-163-205-00	CERAMIC CHIP	0.001MF	10%	50V
C816	0-551-837-00	CAP, PP FILM			
C819	1-136-189-00	FILM	0.1MF	10%	250V
C820	1-124-927-11	ELECT	4.7MF	20%	50V
C821	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C822	1-124-910-11	ELECT	47MF	20%	50V
C823	1-137-370-11	FILM	0.01MF	5%	50V
C824	1-162-117-00	CERAMIC	100PF	10%	500V
C825	1-124-790-11	ELECT	0.47MF	20%	100V
C826	1-124-910-11	ELECT	47MF	20%	50V
C833	1-130-471-00	FILM	0.001MF	5%	50V
C834	1-162-114-00	CERAMIC	0.0047MF		2KV
C835	1-123-950-00	ELECT	47MF	20%	250V
C836	1-102-228-00	CERAMIC	470PF	10%	500V
C837	1-102-228-00	CERAMIC	470PF	10%	500V
C838	1-102-228-00	CERAMIC	470PF	10%	500V
C839	1-124-480-11	ELECT	470MF	20%	25V
C840	1-124-480-11	ELECT	470MF	20%	25V
C841	1-106-375-12	MYLAR	0.022MF	10%	250V
C842	1-136-559-11	MYLAR	0.0047MF	10%	400V
C845	1-106-220-00	MYLAR	0.1MF	10%	100V
C855	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C860	1-137-370-11	FILM	0.01MF	5%	50V
C861	1-130-471-00	FILM	0.001MF	5%	50V
C862	1-124-907-11	ELECT	10MF	20%	50V
C863	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V
C871	1-130-777-00	FILM	0.1MF	5%	63V
C872	1-163-075-00	CERAMIC CHIP	0.047MF	10%	25V
C873	1-162-115-00	CERAMIC	330PF	10%	2KV
C874	1-164-625-11	CERAMIC	680PF	10%	500V
C890	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C891	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C1501	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C1502	1-124-903-11	ELECT	1MF	20%	50V
C1503	1-124-907-11	ELECT	10MF	20%	50V
C1504	1-124-122-11	ELECT	100MF	20%	50V
C1505	1-137-371-11	FILM	0.015MF	5%	50V
C1506	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1507	1-106-383-00	MYLAR	0.047MF	10%	100V
C1508	1-137-423-11	MYLAR	0.15MF	10%	100V
C1510	1-136-110-00	FILM	0.91MF	5%	200V
C1511	1-124-480-11	ELECT	470MF	20%	25V
C1512	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1513	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1514	1-124-480-11	ELECT	470MF	20%	25V
C1516	1-124-006-11	ELECT	10MF	20%	25V
C2502	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C2503	1-163-139-00	CERAMIC CHIP	820PF	5%	50V
C2504	1-124-120-11	ELECT	220MF	20%	16V
C2505	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C2506	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C2507	1-124-903-11	ELECT	1MF	20%	50V
C2508	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2509	1-124-903-11	ELECT	1MF	20%	50V
C2511	1-163-002-11	CERAMIC CHIP	270PF	10%	50V
C2520	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C2521	1-124-927-11	ELECT	4.7MF	20%	50V
C2522	1-124-927-11	ELECT	4.7MF	20%	50V
C2523	1-124-910-11	ELECT	47MF	20%	50V
C2528	1-164-695-11	CERAMIC CHIP	0.0022MF	5%	50V

<CONNECTOR>

CN0005	1-695-915-11	TAB (CONTACT)
CN0009	*1-564-506-11	PLUG, CONNECTOR 3P
CN0502	*1-564-506-11	PLUG, CONNECTOR 3P
CN0504	1-564-511-11	PLUG, CONNECTOR 8P
CN0521	*1-508-767-00	PIN, CONNECTOR (5MM PITCH) 5P
CN0523	1-573-296-11	CONNECTOR, BOARD TO BOARD 10P
CN0544	1-573-296-11	CONNECTOR, BOARD TO BOARD 10P
CN0546	*1-564-514-11	PLUG, CONNECTOR 11P
CN0547	1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P

<DIODE>

D802	8-719-979-99	DIODE ERD08M-15
	4-382-854-11	SCREW (M3X10), P, SW (+); D802
D803	8-719-043-14	DIODE ESAD39M-06C
	4-382-854-11	SCREW (M3X10), P, SW (+); D803
D804	8-719-971-20	DIODE ERC38-06
D805	8-719-908-03	DIODE GP08D
D806	8-719-908-03	DIODE GP08D
D807	8-719-914-43	DIODE DAN202K
D808	8-719-914-44	DIODE DAP202K
D810	8-719-018-82	DIODE RGP02-20EL-6394
D811	8-719-302-43	DIODE EL1Z
D812	8-719-302-43	DIODE EL1Z
D813	8-719-302-43	DIODE EL1Z
D814	8-719-979-85	DIODE EGP20G
D819	8-719-914-43	DIODE DAN202K
D860	8-719-914-44	DIODE DAP202K
D861	8-719-914-42	DIODE DA204K
D862	8-719-914-43	DIODE DAN202K
D863	8-719-914-43	DIODE DAN202K
D871	8-719-914-44	DIODE DAP202K
D1501	8-719-914-43	DIODE DAN202K
D1502	8-719-982-03	DIODE MTZJ-3.6A
D1503	8-719-908-03	DIODE GP08D
D2501	8-719-914-44	DIODE DAP202K
D2502	8-719-109-85	DIODE RD5.1ESB2
D2503	8-719-908-03	DIODE GP08D
D2507	8-719-914-44	DIODE DAP202K
D2508	8-719-914-43	DIODE DAN202K

<PLUG>

DY1	*1-568-536-11	PLUG (MINIATURE DY) 6P

<IC>

IC801	8-759-103-93	IC UPC393C
IC1501	8-759-192-71	IC STV9379
	4-202-373-01	SPRING, IC; IC1501
	4-812-134-00	RIVET NYLON, 3.5; IC1501
IC2501	8-759-076-84	IC LA7851MK

<JUMPER RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
JR1	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR2	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR3	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR4	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR6	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR7	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR8	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR9	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR10	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR11	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR12	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR13	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR14	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR501	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR502	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR503	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR504	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR505	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR506	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR507	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR508	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR509	1-216-296-91	METAL GLAZE	0	5%	1/8W	

<COIL>

L802	1-459-123-00	COIL,DUST CORE(PAC)	
L803	1-459-123-00	COIL,DUST CORE(PAC)	
L808	1-412-519-11	INDUCTOR	3.3UH
L809	1-412-519-11	INDUCTOR	3.3UH
L810	1-412-519-11	INDUCTOR	3.3UH
L811	1-459-104-00	COIL, WITH CORE	
L813	1-459-104-00	COIL, WITH CORE	
L814	1-422-613-11	COIL, AIR CORE	
L816	1-408-947-00	INDUCTOR	2.2MMH
L817	1-422-613-11	COIL, AIR CORE	
L818	1-459-123-00	COIL,DUST CORE(PAC)	
L1503	1-412-524-11	INDUCTOR	8.2UH

<TRANSISTOR>

Q801	8-729-119-80	TRANSISTOR 2SC2688-LK
Q802	8-729-821-07	TRANSISTOR 2SC3997CA
	4-200-399-01	SPACER, IC; Q802
	4-382-854-11	SCREW (M3X10), P, SW (+); Q802
Q803	8-729-017-06	TRANSISTOR 2SC4793
	4-382-854-11	SCREW (M3X10), P, SW (+); Q803
Q804	8-729-378-84	TRANSISTOR 2SD788-5
Q805	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q806	8-729-903-29	TRANSISTOR DTA144TK
Q860	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q861	8-729-216-22	TRANSISTOR 2SA1162-G
Q1501	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1502	8-729-901-01	TRANSISTOR DTC144EK
Q1503	8-729-216-22	TRANSISTOR 2SA1162-G
Q1504	8-729-901-01	TRANSISTOR DTC144EK
Q1505	8-729-926-79	TRANSISTOR IRFIBC40
Q2502	8-729-900-51	TRANSISTOR DTA114TK

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R801	1-249-399-11	CARBON	33	5%	1/4W	F
R802	1-215-914-11	METAL OXIDE	330	5%	3W	F
R803	1-215-914-11	METAL OXIDE	330	5%	3W	F
R804	1-215-914-11	METAL OXIDE	330	5%	3W	F
R805	1-216-485-11	METAL OXIDE	5.6K	5%	3W	F
R806	1-249-411-11	CARBON	330	5%	1/4W	
R807	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R809	1-215-880-00	METAL OXIDE	10	5%	2W	F
R810	1-215-914-11	METAL OXIDE	330	5%	3W	F
R812	1-216-400-71	METAL OXIDE	8.2	5%	3W	F
R813	1-216-400-71	METAL OXIDE	8.2	5%	3W	F
R814	1-216-400-71	METAL OXIDE	8.2	5%	3W	F
R815	1-216-434-11	METAL OXIDE	1.8K	5%	1W	F
R816	1-249-377-11	CARBON	0.47	5%	1/4W	F
R817	1-249-377-11	CARBON	0.47	5%	1/4W	F
R818	1-249-377-11	CARBON	0.47	5%	1/4W	F
R819	1-249-377-11	CARBON	0.47	5%	1/4W	F
R820	1-214-907-00	METAL	56K	1%	1/2W	
R821	1-249-428-11	CARBON	8.2K	5%	1/4W	
R822	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R826	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R830	1-211-795-71	FUSIBLE	470	5%	1/4W	F
R831	1-215-915-11	METAL OXIDE	470	5%	3W	F
R833	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R834	1-202-842-11	SOLID	220K	20%	1/2W	
R835	1-216-230-00	METAL GLAZE	22K	5%	1/8W	
R837	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R838	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R839	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R840	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R841	1-249-423-11	CARBON	3.3K	5%	1/4W	
R842	1-249-399-11	CARBON	33	5%	1/4W	F
R843	1-202-826-00	SOLID	4.7K	10%	1/2W	
R844	1-215-445-00	METAL	10K	1%	1/4W	
R845	1-216-099-00	METAL GLAZE	120K	5%	1/10W	
R847	1-249-416-11	CARBON	820	5%	1/4W	
R848	1-215-477-00	METAL	220K	1%	1/4W	
R849	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R850	1-249-409-11	CARBON	220	5%	1/4W	
R851	1-216-374-71	METAL OXIDE	2.7	5%	2W	F
R852	1-216-109-00	METAL GLAZE	330K	5%	1/10W	
R853	1-216-107-00	METAL GLAZE	270K	5%	1/10W	
R855	1-216-125-00	METAL GLAZE	1.5M	5%	1/10W	
R857	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R858	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R860	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R861	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R862	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R863	1-216-222-00	METAL GLAZE	10K	5%	1/8W	
R864	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R865	1-216-208-00	METAL GLAZE	2.7K	5%	1/8W	
R866	1-249-389-11	CARBON	4.7	5%	1/4W	F
R871	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R872	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R873	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R890	1-216-256-00	METAL GLAZE	270K	5%	1/8W	
R891	1-216-103-91	METAL GLAZE	180K	5%	1/10W	
R892	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R893	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R894	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R899	1-249-377-11	CARBON	0.47	5%	1/4W	F
R1501	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W	
R1502	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

D D2

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1504	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1505	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1506	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1508	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1510	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1511	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1512	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R1513	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1514	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1515	1-215-461-00	METAL	47K	1%	1/4W	
R1516	1-249-385-11	CARBON	2.2	5%	1/4W	F
R1517	⚠1-216-376-00	METAL OXIDE	3.9	5%	2W	F
R1518	⚠1-216-392-11	METAL OXIDE	1.8	5%	3W	F
R1519	⚠1-216-475-11	METAL OXIDE	120	5%	3W	F
R1520	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R1521	1-249-424-11	CARBON	3.9K	5%	1/4W	
R2501	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2502	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W	
R2503	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R2504	1-216-674-11	METAL CHIP	9.1K	0.50%	1/10W	
R2505	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R2506	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	
R2507	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R2508	1-216-678-11	METAL CHIP	13K	0.50%	1/10W	
R2509	1-216-687-11	METAL CHIP	33K	0.50%	1/10W	
R2510	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	
R2511	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	
R2512	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R2513	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R2514	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R2515	1-216-246-91	METAL GLAZE	100K	5%	1/8W	
R2525	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R2527	1-249-397-11	CARBON	22	5%	1/4W	F
R2529	1-216-230-00	METAL GLAZE	22K	5%	1/8W	
R2530	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2531	1-216-073-00	METAL GLAZE	10K	5%	1/10W	

<VARIABLE RESISTOR>

REF.NO.	PART NO.	DESCRIPTION
RV1501	1-241-786-11	RES, ADJ, CARBON 22K
RV2501	1-241-763-11	RES, ADJ, CERMET 4.7K

<TRANSFORMER>

REF.NO.	PART NO.	DESCRIPTION
T801	1-437-090-00	HDT
T803	1-426-897-11	TRANSFORMER, FERRITE (PMT)
T804	1-426-939-11	HLT
T805	⚠8-598-943-00	TRANSFORMER ASSY, FLYBACK(NX-2661//U2B)
T806	1-413-059-00	TRANSFORMER, FERRITE (DFT)

****

*A-1642-111-A D2 BOARD, COMPLETE
****

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C1841	1-130-481-00	FILM	0.0068MF	5%	50V	
C1844	1-106-367-00	MYLAR	0.01MF	10%	400V	
C1845	1-106-220-00	MYLAR	0.1MF	10%	100V	
C1851	1-124-910-11	ELECT	47MF	20%	50V	
C1852	1-124-910-11	ELECT	47MF	20%	50V	
C1853	1-124-907-11	ELECT	10MF	20%	50V	
C1854	1-124-910-11	ELECT	47MF	20%	50V	
C1855	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C1856	1-124-907-11	ELECT	10MF	20%	50V	
C1857	1-124-360-00	ELECT	1000MF	20%	16V	
C1858	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V	
C1859	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V	
C1860	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V	
C1861	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V	
C1862	1-124-657-00	ELECT	10MF	20%	50V	
C1863	1-129-720-00	FILM	0.033MF	5%	630V	
C1868	1-162-318-11	CERAMIC	0.001MF	10%	500V	
C1869	1-106-363-00	MYLAR	0.0068MF	10%	400V	
C1892	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
CN1823	*1-573-299-11	CONNECTOR, BOARD TO BOARD 10P
CN1841	*1-568-878-51	PIN, CONNECTOR 3P

<DIODE>

REF.NO.	PART NO.	DESCRIPTION
D1840	8-719-302-43	DIODE EL1Z
D1841	8-719-914-43	DIODE DAN202K
D1851	8-719-110-41	DIODE RD15ESB2
D1852	8-719-110-41	DIODE RD15ESB2
D1853	8-719-914-42	DIODE DA204K
D1856	8-719-914-43	DIODE DAN202K
D1867	8-719-302-43	DIODE EL1Z
D1868	8-719-302-43	DIODE EL1Z
D1882	8-719-109-89	DIODE RD5.6ESB2
D1883	8-719-109-89	DIODE RD5.6ESB2

<IC>

REF.NO.	PART NO.	DESCRIPTION
IC1851	8-759-708-05	IC NJM78L05A
IC1852	8-759-145-58	IC UPC4558C
IC1853	8-759-902-21	IC SN74LS221N

<JUMPER RESISTOR>

REF.NO.	PART NO.	DESCRIPTION			
JR1851	1-216-295-00	METAL GLAZE	0	5%	1/10W

<COIL>

REF.NO.	PART NO.	DESCRIPTION
L1841	1-459-075-00	COIL,DYNAMIC CONVERSION CHOKE
L1843	1-459-104-00	COIL, WITH CORE
L1852	1-459-390-00	COIL (WITH CORE)

<IC LINK>

REF.NO.	PART NO.	DESCRIPTION
PS1851	⚠1-532-727-91	LINK, IC 0.25A
PS1852	⚠1-532-727-91	LINK, IC 0.25A

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION
Q1840	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1841	8-729-017-06	TRANSISTOR 2SC4793
Q1851	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1854	8-729-216-22	TRANSISTOR 2SA1162-G
Q1855	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1856	8-729-017-05	TRANSISTOR 2SA1837
Q1857	8-729-017-05	TRANSISTOR 2SA1837
	4-382-854-11	SCREW (M3X10), P, SW (+); Q1857
Q1858	8-729-017-06	TRANSISTOR 2SC4793
	4-382-854-11	SCREW (M3X10), P, SW (+); Q1857
Q1859	8-729-216-22	TRANSISTOR 2SA1162-G

REF.NO.	PART NO.	DESCRIPTION				REMARK
Q1860	8-729-920-74	TRANSISTOR 2SC2412K-QR				
Q1861	8-729-017-06	TRANSISTOR 2SC4793				

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1841	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R1842	1-260-111-11	CARBON	10K	5%	1/2W	
R1843	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1844	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1847	1-249-399-11	CARBON	33	5%	1/4W	F
R1848	1-215-875-11	METAL OXIDE	10K	5%	1W	F
R1849	1-260-111-11	CARBON	10K	5%	1/2W	
R1851	1-216-429-00	METAL OXIDE	270	5%	1W	F
R1852	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1853	1-216-684-91	METAL CHIP	24K	0.50%	1/10W	
R1854	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R1855	1-216-429-00	METAL OXIDE	270	5%	1W	F
R1856	1-216-474-11	METAL OXIDE	82	5%	3W	F
R1861	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1862	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1863	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1864	1-215-875-11	METAL OXIDE	10K	5%	1W	F
R1865	1-216-474-11	METAL OXIDE	82	5%	3W	F
R1866	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R1875	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W	
R1877	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R1878	1-260-092-11	CARBON	270	5%	1/2W	
R1881	1-260-092-11	CARBON	270	5%	1/2W	
R1885	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1894	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1895	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1896	1-215-867-00	METAL OXIDE	470	5%	1W	F
R1898	1-216-013-00	METAL GLAZE	33	5%	1/10W	
R1899	1-216-013-00	METAL GLAZE	33	5%	1/10W	

<VARIABLE RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
RV1851	1-241-765-11	RES, ADJ, CERMET 22K	
RV1853	1-241-628-11	RES, ADJ, CARBON 2.2K	

<TRANSFORMER>

REF.NO.	PART NO.	DESCRIPTION	REMARK
T1851	1-423-786-11	TRANSFORMER, FERRITE (VPOT)	

`*************************************************************`

*A-1642-126-A E2 BOARD, COMPLETE (KV-S2941B)
`******************`

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C1	1-126-103-11	ELECT	470MF	20%	16V	
C2	1-163-031-11	CERAMIC CHIP	0.01MF		50V	
C3	1-163-031-11	CERAMIC CHIP	0.01MF		50V	
C4	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V	
C5	1-163-237-11	CERAMIC CHIP	27PF	5%	50V	
C6	1-163-237-11	CERAMIC CHIP	27PF	5%	50V	
C7	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C8	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C9	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C10	1-163-123-00	CERAMIC CHIP	180PF	5%	50V	
C11	1-163-105-00	CERAMIC CHIP	33PF	5%	50V	
C12	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	
C13	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	
C14	1-124-903-11	ELECT	1MF	20%	50V	
C15	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V	
C16	1-124-907-11	ELECT	10MF	20%	50V	
C17	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V	
C18	1-163-119-00	CERAMIC CHIP	120PF	5%	50V	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN2	*1-568-880-51	PIN, CONNECTOR 5P	

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D1	8-719-914-43	DIODE DAN202K	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC1	8-759-521-22	IC TDA4650/V4	
IC2	8-759-140-53	IC UPD4053BC	

<JUMPER RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
JR1	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR2	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR3	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR4	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR5	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR101	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR104	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR105	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR106	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR107	1-216-296-91	METAL GLAZE	0	5%	1/8W	

<COIL>

REF.NO.	PART NO.	DESCRIPTION		REMARK
L1	1-408-421-00	INDUCTOR	100UH	
L2	1-404-554-11	COIL		
L3	1-404-554-11	COIL		

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q2	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q4	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q5	8-729-120-28	TRANSISTOR 2SC1623-L5L6	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R2	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R3	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R4	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R5	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R6	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R7	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R8	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R9	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R10	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R11	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R12	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R13	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R14	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R16	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R17	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R18	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R19	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R20	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	

****

*A-1644-048-A VM BOARD, COMPLETE

****

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C1701	1-124-119-00	ELECT	330MF	20%	16V	
C1704	1-161-830-00	CERAMIC	0.0047MF		500V	
C1705	1-124-120-11	ELECT	220MF	20%	16V	
C1706	1-123-935-00	ELECT	33MF	20%	160V	
C1707	1-124-907-11	ELECT	10MF	20%	50V	
C1708	1-163-075-00	CERAMIC CHIP	0.047MF		50V	
C1709	1-108-792-11	MYLAR	0.001MF	10%	50V	
C1710	1-137-036-91	FILM	0.01MF	10%	250V	
C1711	1-162-318-11	CERAMIC	0.001MF	10%	500V	
C1712	1-124-799-11	ELECT	2.2MF	20%	160V	
C1713	1-162-318-11	CERAMIC	0.001MF	10%	500V	
C1714	1-137-036-91	FILM	0.01MF	10%	250V	
C1716	1-124-907-11	ELECT	10MF	20%	50V	
C1717	1-102-824-00	CERAMIC	470PF	5%	50V	
C1718	1-124-120-11	ELECT	220MF	20%	16V	
C1719	1-124-907-11	ELECT	10MF	20%	50V	
C1722	1-102-980-00	CERAMIC	270PF	10%	50V	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN1819	*1-568-880-51	PIN, CONNECTOR 5P	
CN1830	*1-568-878-51	PIN, CONNECTOR 3P	

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D1701	8-719-914-43	DIODE DAN202K	
D1702	8-719-914-43	DIODE DAN202K	
D1703	8-719-914-44	DIODE DAP202K	
D1704	8-719-982-37	DIODE MTZJ-39C	
D1705	8-719-982-37	DIODE MTZJ-39C	
D1706	8-719-914-44	DIODE DAP202K	
D1707	8-719-914-44	DIODE DAP202K	

<JUMPER RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
JR1701	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR1702	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR1703	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR1751	1-216-296-91	METAL GLAZE	0	5%	1/8W	

<COIL>

REF.NO.	PART NO.	DESCRIPTION		REMARK
L1702	1-408-410-00	INDUCTOR	12UH	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q1701	8-729-901-59	TRANSISTOR BF199	
Q1702	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1703	8-729-017-05	TRANSISTOR 2SA1837	
	4-382-854-11	SCREW (M3X10), P, SW (+); Q1703	
Q1704	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1705	8-729-017-06	TRANSISTOR 2SC4793	
	4-382-854-11	SCREW (M3X10), P, SW (+); Q1705	
Q1706	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1707	8-729-142-86	TRANSISTOR 2SC3733	
Q1708	8-729-901-59	TRANSISTOR BF199	
Q1709	8-729-255-12	TRANSISTOR 2SC2551-O	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1701	1-247-807-31	CARBON	100	5%	1/4W	
R1702	1-249-413-11	CARBON	470	5%	1/4W	
R1703	1-247-807-31	CARBON	100	5%	1/4W	
R1704	1-249-418-11	CARBON	1.2K	5%	1/4W	
R1705	1-247-736-11	CARBON	56	5%	1/2W	F
R1706	1-249-414-11	CARBON	560	5%	1/4W	F
R1707	1-249-411-11	CARBON	330	5%	1/4W	
R1709	1-249-412-11	CARBON	390	5%	1/4W	
R1710	1-249-385-11	CARBON	2.2	5%	1/4W	F
R1711	1-249-432-11	CARBON	18K	5%	1/4W	
R1712	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R1713	1-249-436-11	CARBON	39K	5%	1/4W	
R1714	1-249-429-11	CARBON	10K	5%	1/4W	
R1715	1-216-476-11	METAL OXIDE	180	5%	3W	F
R1716	1-249-417-11	CARBON	1K	5%	1/4W	F
R1717	1-249-432-11	CARBON	18K	5%	1/4W	
R1718	1-249-412-11	CARBON	390	5%	1/4W	
R1719	1-249-416-11	CARBON	820	5%	1/4W	
R1720	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1721	1-249-414-11	CARBON	560	5%	1/4W	
R1722	1-249-385-11	CARBON	2.2	5%	1/4W	F
R1723	1-249-429-11	CARBON	10K	5%	1/4W	
R1724	1-249-436-11	CARBON	39K	5%	1/4W	
R1725	1-249-413-11	CARBON	470	5%	1/4W	
R1726	1-249-410-11	CARBON	270	5%	1/4W	
R1727	1-249-402-11	CARBON	56	5%	1/4W	F
R1729	1-216-451-11	METAL OXIDE	120	5%	2W	F
R1731	1-249-420-11	CARBON	1.8K	5%	1/4W	
R1732	1-249-426-11	CARBON	5.6K	5%	1/4W	
R1735	1-249-415-11	CARBON	680	5%	1/4W	
R1736	1-247-807-31	CARBON	100	5%	1/4W	
R1753	1-249-418-11	CARBON	1.2K	5%	1/4W	

****

*A-1646-055-A H1 BOARD, COMPLETE

****

REF.NO.	PART NO.	DESCRIPTION	REMARK
	1-562-837-11	JACK	

<TERMINAL BLOCK>

REF.NO.	PART NO.	DESCRIPTION	REMARK
J81	1-568-678-11	TERMINAL BLOCK, S 3P	

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C081	1-163-181-00	CERAMIC CHIP	100PF	5%	50V	
C082	1-163-181-00	CERAMIC CHIP	100PF	5%	50V	
C083	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V	
C087	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN1008	*1-564-513-11	PLUG, CONNECTOR 10P	
CN1051	*1-568-879-11	PIN, CONNECTOR 4P	

<JUMPER RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
JR1	1-216-295-00	METAL GLAZE	0	5%	1/10W	

<COIL>

REF.NO.	PART NO.	DESCRIPTION			REMARK
L081	1-408-409-00	INDUCTOR	10UH		
L082	1-408-409-00	INDUCTOR	10UH		

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R081	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R082	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R083	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R084	1-216-202-00	METAL GLAZE	1.5K	5%	1/8W	
R085	1-216-202-00	METAL GLAZE	1.5K	5%	1/8W	

<SWITCH>

REF.NO.	PART NO.	DESCRIPTION	REMARK
S081	1-571-532-21	SWITCH, TACTIL	
S082	1-571-532-21	SWITCH, TACTIL	
S083	1-571-532-21	SWITCH, TACTIL	

****

*A-1646-056-A H2 BOARD, COMPRETE
****

REF.NO.	PART NO.	DESCRIPTION	REMARK
	*4-374-987-01	GUIDE, LIGHT	
	4-381-686-01	BRACKET (B), LIGHT GUIDE	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN1132	1-564-511-11	PLUG, CONNECTOR 8P	

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D092	8-719-948-31	DIODE LD-201VR	
	*4-201-076-01	HOLDER, LED; D092	
D093	8-719-948-31	DIODE LD-201VR	
D094	8-719-948-31	DIODE LD-201VR	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC091	8-741-101-75	IC SBX1610-11	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R091	1-216-190-00	METAL GLAZE	470	5%	1/8W	

****

*A-1651-060-A J BOARD, COMPLETE
****

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
C270	1-163-063-00	CERAMIC CHIP	0.022MF		50V
C271	1-163-063-00	CERAMIC CHIP	0.022MF		50V
C295	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C296	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C298	1-101-005-00	CERAMIC	0.022MF		50V
C401	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C402	1-126-101-11	ELECT	100MF	20%	16V
C403	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C410	1-124-917-11	ELECT	33MF	20%	50V
C421	1-124-910-11	ELECT	47MF	20%	50V
C422	1-124-910-11	ELECT	47MF	20%	50V
C423	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C424	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C425	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C426	1-124-477-11	ELECT	47MF	20%	16V
C427	1-164-346-11	CERAMIC CHIP	1MF		16V
C428	1-164-346-11	CERAMIC CHIP	1MF		16V
C429	1-124-119-00	ELECT	330MF	20%	16V
C901	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C902	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C904	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C905	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C906	1-101-004-00	CERAMIC	0.01MF		50V
C907	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C908	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C909	1-101-004-00	CERAMIC	0.01MF		50V
C910	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C911	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C912	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C913	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C914	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C915	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C916	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C917	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C918	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C919	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C920	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C921	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C922	1-124-477-11	ELECT	47MF	20%	16V
C923	1-164-346-11	CERAMIC CHIP	1MF		16V
C924	1-124-477-11	ELECT	47MF	20%	16V
C925	1-124-477-11	ELECT	47MF	20%	16V
C926	1-164-346-11	CERAMIC CHIP	1MF		16V
C928	1-124-477-11	ELECT	47MF	20%	16V
C929	1-124-477-11	ELECT	47MF	20%	16V
C930	1-124-477-11	ELECT	47MF	20%	16V
C931	1-164-346-11	CERAMIC CHIP	1MF		16V
C932	1-164-346-11	CERAMIC CHIP	1MF		16V
C933	1-124-477-11	ELECT	47MF	20%	16V
C935	1-124-477-11	ELECT	47MF	20%	16V
C936	1-164-346-11	CERAMIC CHIP	1MF		16V
C937	1-164-346-11	CERAMIC CHIP	1MF		16V
C938	1-124-477-11	ELECT	47MF	20%	16V
C1301	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1302	1-126-101-11	ELECT	100MF	20%	16V
C1303	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1304	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1305	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C1306	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C1307	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1309	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C1310	1-126-101-11	ELECT	100MF	20%	16V
C1311	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C1312	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1313	1-124-917-11	ELECT	33MF	20%	50V
C1318	1-124-910-11	ELECT	47MF	20%	50V
C1319	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1320	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C1321	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1322	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1323	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1324	1-126-101-11	ELECT	100MF	20%	16V
C1325	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1326	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1327	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1328	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1329	1-163-038-00	CERAMIC CHIP	0.1MF		25V

J

REF.NO.	PART NO.	DESCRIPTION		REMARK
C1330	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C1331	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C1332	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C1333	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C1336	1-163-249-11	CERAMIC CHIP 82PF	5%	50V
C1337	1-163-257-11	CERAMIC CHIP 180PF	5%	50V
C1338	1-163-227-11	CERAMIC CHIP 10PF	0.5PF	50V
C1339	1-163-227-11	CERAMIC CHIP 10PF	0.5PF	50V
C1340	1-124-910-11	ELECT 47MF	20%	50V
C1344	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C1408	1-163-101-00	CERAMIC CHIP 22PF	5%	50V
		<CONNECTOR>		
CN1208*	1-564-525-11	PLUG, CONNECTOR 10P		
CN1209	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P		
CN1210*	1-564-522-11	PLUG, CONNECTOR 7P		
CN1233*	1-564-518-11	PLUG, CONNECTOR 3P		
		<DIODE>		
D401	8-719-921-69	DIODE NTZJ-9.1		
D403	8-719-921-69	DIODE NTZJ-9.1		
D405	8-719-921-69	DIODE NTZJ-9.1		
D406	8-719-921-69	DIODE NTZJ-9.1		
D407	8-719-921-69	DIODE NTZJ-9.1		
D901	8-719-921-69	DIODE NTZJ-9.1		
D902	8-719-921-69	DIODE NTZJ-9.1		
D903	8-719-921-69	DIODE NTZJ-9.1		
D904	8-719-921-69	DIODE NTZJ-9.1		
D905	8-719-921-69	DIODE NTZJ-9.1		
D906	8-719-921-69	DIODE NTZJ-9.1		
D907	8-719-921-69	DIODE NTZJ-9.1		
D908	8-719-921-69	DIODE NTZJ-9.1		
D909	8-719-921-69	DIODE NTZJ-9.1		
D910	8-719-921-69	DIODE NTZJ-9.1		
D911	8-719-921-69	DIODE NTZJ-9.1		
D913	8-719-921-69	DIODE NTZJ-9.1		
D914	8-719-921-69	DIODE NTZJ-9.1		
D915	8-719-921-69	DIODE NTZJ-9.1		
D916	8-719-921-69	DIODE NTZJ-9.1		
D917	8-719-921-69	DIODE NTZJ-9.1		
D919	8-719-921-69	DIODE NTZJ-9.1		
D920	8-719-921-69	DIODE NTZJ-9.1		
D921	8-719-921-69	DIODE NTZJ-9.1		
D922	8-719-921-69	DIODE NTZJ-9.1		
D923	8-719-921-69	DIODE NTZJ-9.1		
D924	8-719-921-69	DIODE NTZJ-9.1		
D925	8-719-921-69	DIODE NTZJ-9.1		
D926	8-719-921-69	DIODE NTZJ-9.1		
D927	8-719-921-69	DIODE NTZJ-9.1		
D928	8-719-921-69	DIODE NTZJ-9.1		
D930	8-719-921-69	DIODE NTZJ-9.1		
D931	8-719-921-69	DIODE NTZJ-9.1		
D932	8-719-921-69	DIODE NTZJ-9.1		
D1301	8-719-914-43	DIODE DAN202K		
		<FILTER>		
FL1301	1-236-620-11	FILTER, LOW PASS		
FL1302	1-236-620-11	FILTER, LOW PASS		
FL1303	0-552-483-00	BPF		
FL1303	1-239-930-11	FILTER, BAND PASS		
FL1304	1-236-164-11	ENCAPSULATED COMPONENT		

REF.NO.	PART NO.	DESCRIPTION		REMARK
		<IC>		
IC401	8-752-067-28	IC CXA1545AS		
IC402	8-759-073-00	IC TEA2114		
IC1301	8-752-357-88	IC CXD2024Q-TL		
		<JACK>		
J901	1-695-296-11	TERMINAL BLOCK, S		
J903	1-695-550-11	SOCKET 21P		
J904	1-695-296-11	TERMINAL BLOCK, S		
J905	1-695-293-11	SOCKET 21P		
J906	1-695-296-11	TERMINAL BLOCK, S		
J907	1-695-293-11	SOCKET 21P		
		<JUMPER RESISTOR>		
JR291	1-216-295-00	METAL GLAZE 0	5%	1/10W
JR292	1-216-295-00	METAL GLAZE 0	5%	1/10W
JR293	1-216-295-00	METAL GLAZE 0	5%	1/10W
JR401	1-216-295-00	METAL GLAZE 0	5%	1/10W
JR402	1-216-295-00	METAL GLAZE 0	5%	1/10W
JR403	1-216-295-00	METAL GLAZE 0	5%	1/10W
JR404	1-216-295-00	METAL GLAZE 0	5%	1/10W
JR405	1-216-295-00	METAL GLAZE 0	5%	1/10W
JR406	1-216-295-00	METAL GLAZE 0	5%	1/10W
		<COIL>		
L291	1-402-711-11	INDUCTOR, WIDEBAND		
L292	1-402-711-11	INDUCTOR, WIDEBAND		
L293	1-402-711-11	INDUCTOR, WIDEBAND		
L1301	1-408-405-00	INDUCTOR 4.7UH		
L1302	1-408-403-00	INDUCTOR 3.3UH		
L1303	1-408-405-00	INDUCTOR 4.7UH		
L1304	1-408-405-00	INDUCTOR 4.7UH		
L1306	1-408-405-00	INDUCTOR 4.7UH		
L1307	1-410-431-11	INDUCTOR 100UH		
L1308	1-410-428-21	INDUCTOR 56UH		
		<TRANSISTOR>		
Q401	8-729-920-74	TRANSISTOR 2SC2412K-QR		
Q402	8-729-920-74	TRANSISTOR 2SC2412K-QR		
Q403	8-729-920-74	TRANSISTOR 2SC2412K-QR		
Q404	8-729-920-74	TRANSISTOR 2SC2412K-QR		
Q1301	8-729-216-22	TRANSISTOR 2SA1162-G		
Q1302	8-729-216-22	TRANSISTOR 2SA1162-G		
Q1303	8-729-216-22	TRANSISTOR 2SA1162-G		
Q1304	8-729-920-74	TRANSISTOR 2SC2412K-QR		
Q1305	8-729-920-74	TRANSISTOR 2SC2412K-QR		
Q1306	8-729-920-74	TRANSISTOR 2SC2412K-QR		
Q1307	8-729-216-22	TRANSISTOR 2SA1162-G		
Q1308	8-729-216-22	TRANSISTOR 2SA1162-G		
Q1309	8-729-920-74	TRANSISTOR 2SC2412K-QR		
Q1311	8-729-920-74	TRANSISTOR 2SC2412K-QR		
Q1312	8-729-216-22	TRANSISTOR 2SA1162-G		
Q1313	8-729-920-74	TRANSISTOR 2SC2412K-QR		
Q1314	8-729-216-22	TRANSISTOR 2SA1162-G		
Q1315	8-729-216-22	TRANSISTOR 2SA1162-G		
		<RESISTOR>		
R291	1-216-190-00	METAL GLAZE 470	5%	1/8W

REF.NO.	PART NO.	DESCRIPTION				REMARK
R292	1-216-190-00	METAL GLAZE	470	5%	1/8W	
R297	1-216-296-91	METAL GLAZE	0	5%	1/8W	
R298	1-216-296-91	METAL GLAZE	0	5%	1/8W	
R402	1-216-158-00	METAL GLAZE	22	5%	1/8W	
R403	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R404	1-216-158-00	METAL GLAZE	22	5%	1/8W	
R405	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R406	1-216-158-00	METAL GLAZE	22	5%	1/8W	
R407	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R410	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R411	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R412	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R413	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R414	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R416	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R417	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R419	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R420	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R421	1-216-171-00	METAL GLAZE	75	5%	1/8W	
R422	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R423	1-216-015-00	METAL GLAZE	39	5%	1/10W	
R424	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R425	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R428	1-249-393-11	CARBON	10	5%	1/4W	F
R429	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R430	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R431	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R432	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R433	1-216-296-91	METAL GLAZE	0	5%	1/8W	
R901	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R902	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R903	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R904	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R905	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R906	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R907	1-216-171-00	METAL GLAZE	75	5%	1/8W	
R908	1-216-171-00	METAL GLAZE	75	5%	1/8W	
R909	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R910	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R911	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R913	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R914	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R915	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R916	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R917	1-216-171-00	METAL GLAZE	75	5%	1/8W	
R919	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R920	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R921	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R922	1-216-222-00	METAL GLAZE	10K	5%	1/8W	
R923	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R924	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R925	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R926	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R927	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R928	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R929	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R930	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R931	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R932	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R933	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R934	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R935	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R936	1-216-171-00	METAL GLAZE	75	5%	1/8W	
R937	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R938	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R939	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R940	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R941	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R942	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R943	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R944	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R945	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R946	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R948	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R949	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R950	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R951	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R952	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R953	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R954	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R955	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R956	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R957	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R958	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R959	1-216-674-11	METAL CHIP	9.1K	0.50%	1/10W	
R960	1-216-674-11	METAL CHIP	9.1K	0.50%	1/10W	
R961	1-216-674-11	METAL CHIP	9.1K	0.50%	1/10W	
R967	1-216-171-00	METAL GLAZE	75	5%	1/8W	
R968	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R969	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R970	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R971	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R972	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R973	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R974	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R975	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R976	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R977	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R1301	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1302	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R1303	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R1304	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R1305	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R1306	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1307	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R1308	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R1309	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R1310	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1311	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1312	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R1313	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1314	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1315	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1316	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R1317	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R1318	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R1319	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R1320	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R1321	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1322	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1324	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R1325	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R1326	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R1327	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1328	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1329	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1330	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	

J

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION	REMARK
R1332	1-216-653-11	METAL CHIP 1.2K 0.50% 1/10W	
R1333	1-216-666-11	METAL CHIP 4.3K 0.50% 1/10W	
R1334	1-216-636-11	METAL CHIP 240 0.50% 1/10W	
R1335	1-216-637-11	METAL CHIP 270 0.50% 1/10W	
R1336	1-216-657-11	METAL CHIP 1.8K 0.50% 1/10W	
R1337	1-216-663-11	METAL CHIP 3.3K 0.50% 1/10W	
R1338	1-216-657-11	METAL CHIP 1.8K 0.50% 1/10W	
R1339	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R1342	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R1344	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R1345	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R1346	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R1347	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R1349	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R1350	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R1351	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1352	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R1353	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R1354	1-216-031-00	METAL GLAZE 180 5% 1/10W	
R1355	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R1356	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1357	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R1358	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R1359	1-216-043-00	METAL GLAZE 560 5% 1/10W	

* * *

MISCELLANEOUS

REF.NO.	PART NO.	DESCRIPTION	REMARK
	⚠1-406-807-11	COIL, DEMAGNETIZATION	
	⚠1-452-509-12	NECK ASSY, PICTURE TUBE (NA-308)	
	1-504-121-21	SPEAKER (SQUAWKER) (5CM)	
	1-504-145-11	SPEAKER (12CM)	
	⚠1-751-680-11	CORD, POWER(WITH NOISE FILTER) 2.5A/ 250V (KV-S2941A,S2941B,S2941D, S2943E,S2941K)	
	⚠1-590-762-11	CORD, POWER(WITH PLUG) 2.5A/250V (KV-S2942U)	
	⚠8-451-444-11	DEFLECTION YOKE Y29GXC (MTY)	
V901	⚠8-733-841-05	PICTURE TUBE 29GX (M68KZT10X)	

* * *

ACCESSORIES AND PACKING MATERIALS

REF.NO.	PART NO.	DESCRIPTION	REMARK
	*4-039-906-01	BAG, PROTECTION	
	*4-202-105-01	CUSHION (LOWER) (ASSY)	
	*4-202-106-01	CUSHION (UPPER) (ASSY)	
	*4-202-117-01	INDIVIDUAL CARTON	
	4-202-137-01	DOOR, REAR	
	4-202-615-11	BROAD SHEET, SERVICE	
	4-202-687-41	MANUAL, INSTRUCTION (KV-S2941A)	
	4-202-687-51	MANUAL, INSTRUCTION (KV-S2941B)	
	4-202-687-11	MANUAL, INSTRUCTION (KV-S2941D)	
	4-202-687-81	MANUAL, INSTRUCTION (KV-S2943E)	
	4-202-687-91	MANUAL, INSTRUCTION (KV-S2941K)	
	4-202-687-61	MANUAL, INSTRUCTION (KV-S2942U)	

REMOTE COMMANDER

REF.NO.	PART NO.	DESCRIPTION	REMARK
	1-466-854-41	REMOTE COMMANDER (RM-860)	
	9-903-664-01	POCKET, COVER	
	1-467-272-21	COMMANDER (STANDARD TYPE) (RM-831)	
	9-903-466-01	POCKET, COVER	

Sony Corporation
Consumer A&V Products Company
TV & Display Products Div.

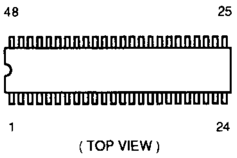
9-964-982-01

English
94DE0968-1
Printed in Japan

© 1994.4

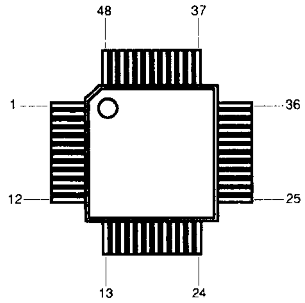
5-4. SEMICONDUCTORS

CXA1855S

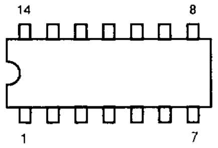


(TOP VIEW)

CXD2018Q

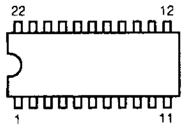

48
37
1
36
12
25
13
24

IR2112



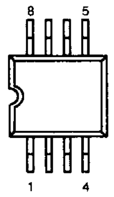
(TOP VIEW)

LA7851MK



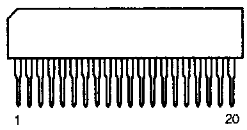
(TOP VIEW)

LM358D

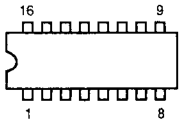


(TOP VIEW)

MB81C4256A-70PSZG

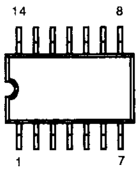


MC14046BDWR2
MC34025P
MC74HC4053N
YM7128



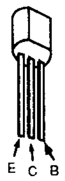
(TOP VIEW)

MC74F08DR2

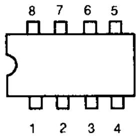


(TOP VIEW)

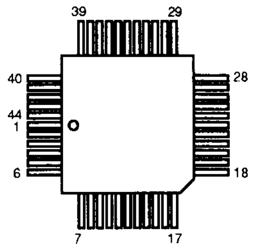
MC78L08ACPRP
NJM78L05A
NJM78M09FA
RC78M15FA



M5216P
ST24C16CB1
TDA2822M
TEA2114
μPC393C
μPC4558C

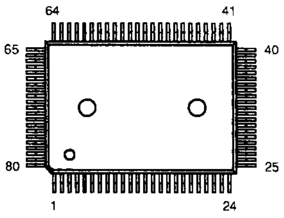


P83C652FBA-V3/AB514
SAA4951


39
29
40
28
44
1
6
18
7
17

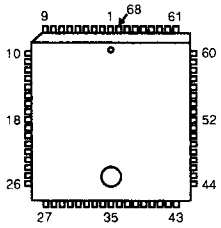
(TOP VIEW)

SAA4940H


64
41
65
40
80
25
1
24

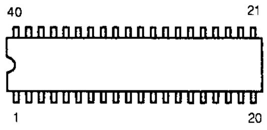
(MARKING SIDE VIEW)

SAA7158
SDA5273P-C22-GEG


9
1
68
61
10
60
18
52
26
44
27
35
43

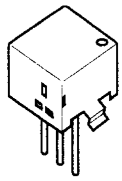
(TOP VIEW)

SAA728P-ZP

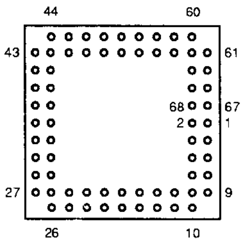


(TOP VIEW)

SBX1610-11

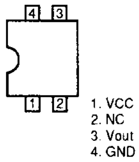


SDA30C163-2GEG

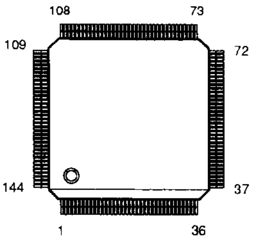

44
60
43
61
68
67
2
1
27
9
26
10

(BOTTOM VIEW)

SFH617G-1

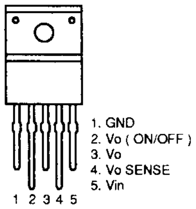

4
3
1
2
1. VCC
2. NC
3. Vout
4. GND

SI-3050CA

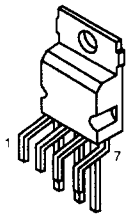

108
73
109
72
144
37
1
36

(TOP VIEW)

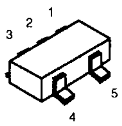
SI-32120CA


1. GND
2. Vo (ON/OFF)
3. Vo
4. Vo SENSE
5. Vin
1 2 3 4 5

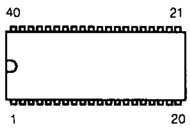
STV9379
TDA2052



TC4S66F

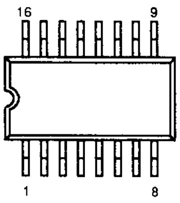


TDA2579B



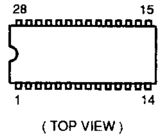
(TOP VIEW)

TDA4665T

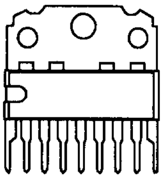


(TOP VIEW)

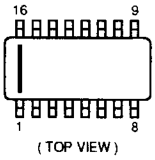
TDA4780


28
15
1
14
(TOP VIEW)

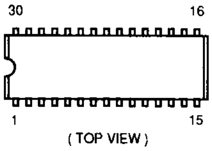
TDA611Q



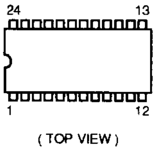
TDA6812-5


16
9
1
8
(TOP VIEW)

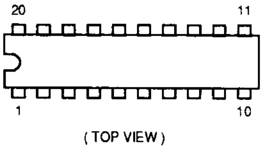
TDA7317


30
16
1
15
(TOP VIEW)

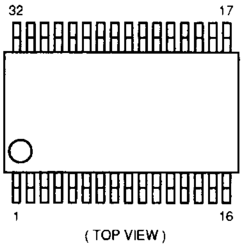
TDA8443B
TDA9145/N2B


24
13
1
12
(TOP VIEW)

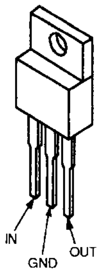
TDA8732


20
11
1
10
(TOP VIEW)

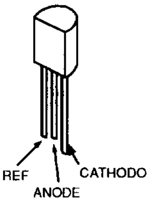
TDA8755


32
17
1
16
(TOP VIEW)

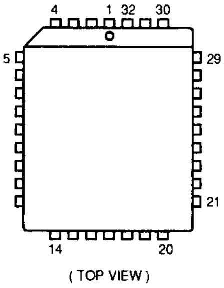
TEA7605



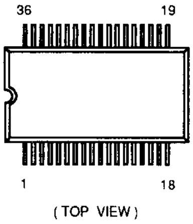
TL431CLP


REF
ANODE
CATHODO

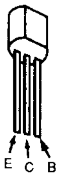
TMS27PC010A-15FMA


4
1
32
30
5
29
21
14
20
(TOP VIEW)

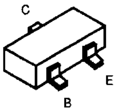
ZA2970-30DTR


36
19
1
18
(TOP VIEW)

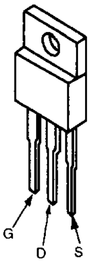
BF199
2SA1837
2SC2551-O
2SD788-5



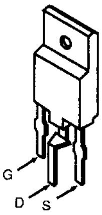
DTA114EK
DTA114TK
DTA124EK
DTA144EK
DTA144TK
DTC114EK
DTC124EK
DTC144EK
2SA1162-G
2SC1623-L5L6
2SC2412K-QR
2SC2413KQ



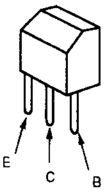
IRFIBC40



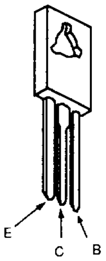
IRFI740G



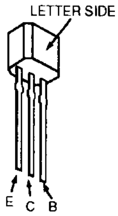
2SB734-34
2SD774-34



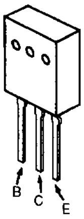
2SB772-Q
2SC2688-LK



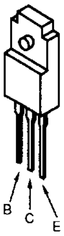
2SC2785-HFE


LETTER SIDE
E
C
B

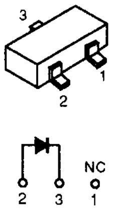
2SC3997CA



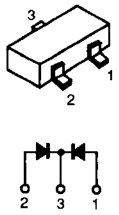
2SC4793



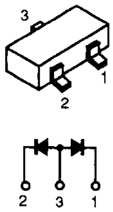
BAS16
BBY40
MA3039H
MA3056H



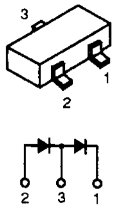
DAN202K



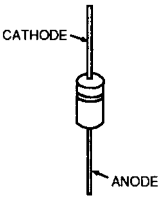
DAP202K



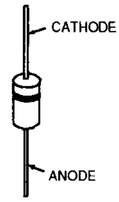
DA204K



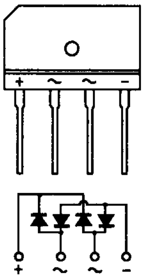
D1NL20
MTZJ-13B
MTZJ-2.2A
MTZJ-3.6A
MTZJ-33C
MTZJ-36B
MTZJ-39C
MTZJ-9.1
RD5.1ESB2
RD5.6ESB2
RD7.5ESB2
RD15ESB2
RD18ESB2
1SS119
1SS133


CATHODE
ANODE

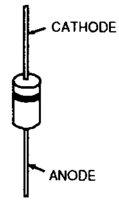
D1N20R
EL1Z
GP08D
RGP02
RGP20G
1SS83


CATHODE
ANODE

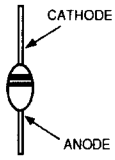
D4SB60L



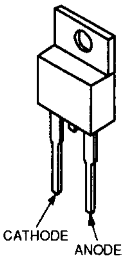
EGP10D


CATHODE
ANODE

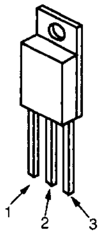
ERC38-06


CATHODE
ANODE

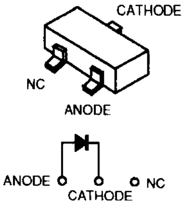
ERD08M-15


CATHODE
ANODE

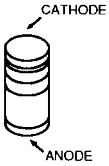
ESAD39M-06M



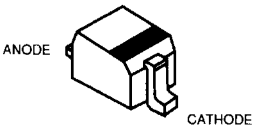
MA3027H
MA3030H


CATHODE
NC
ANODE
ANODE
CATHODE
NC

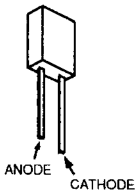
MA3051L


CATHODE
ANODE

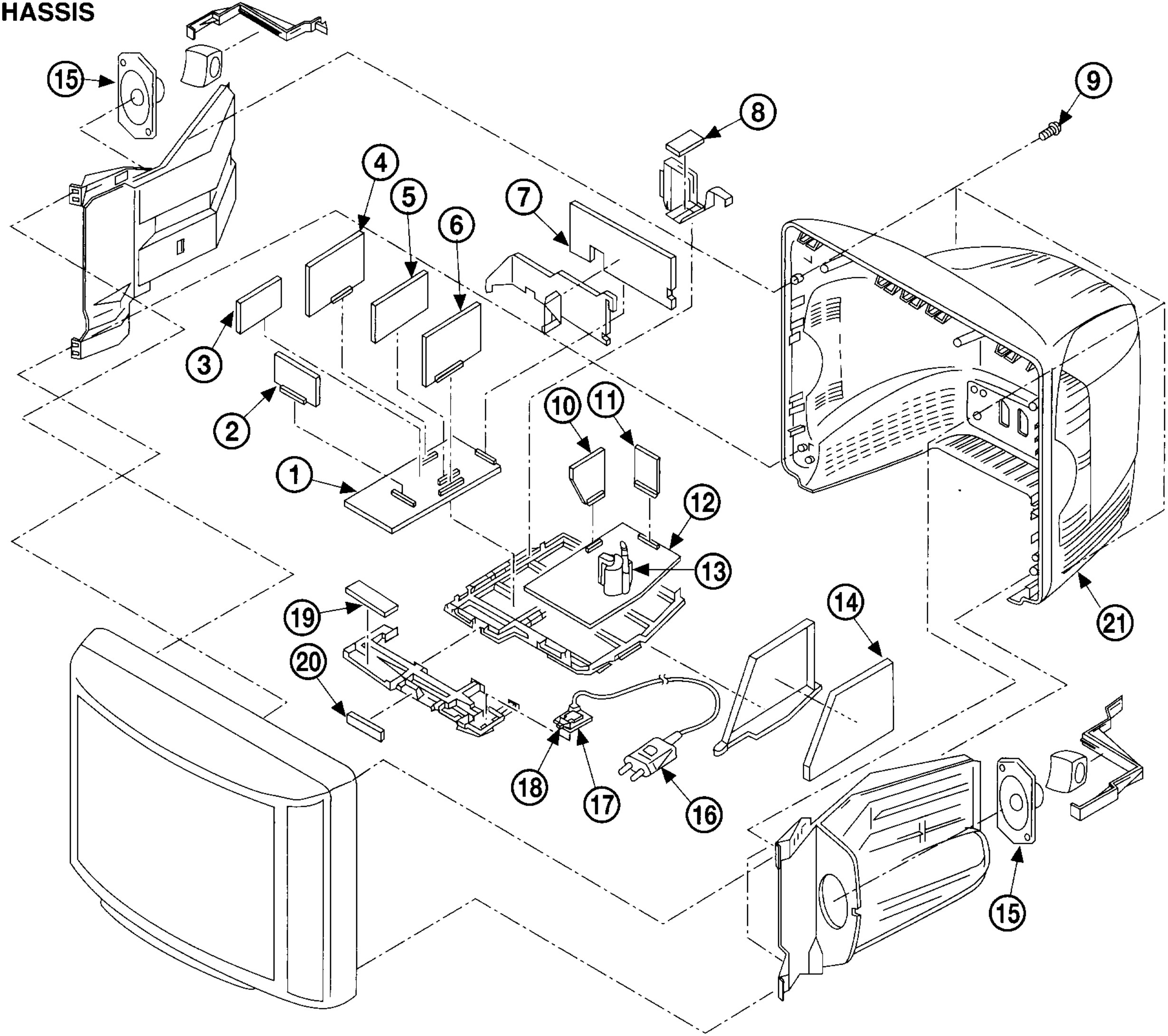
1SV214
1SV217


ANODE
CATHODE

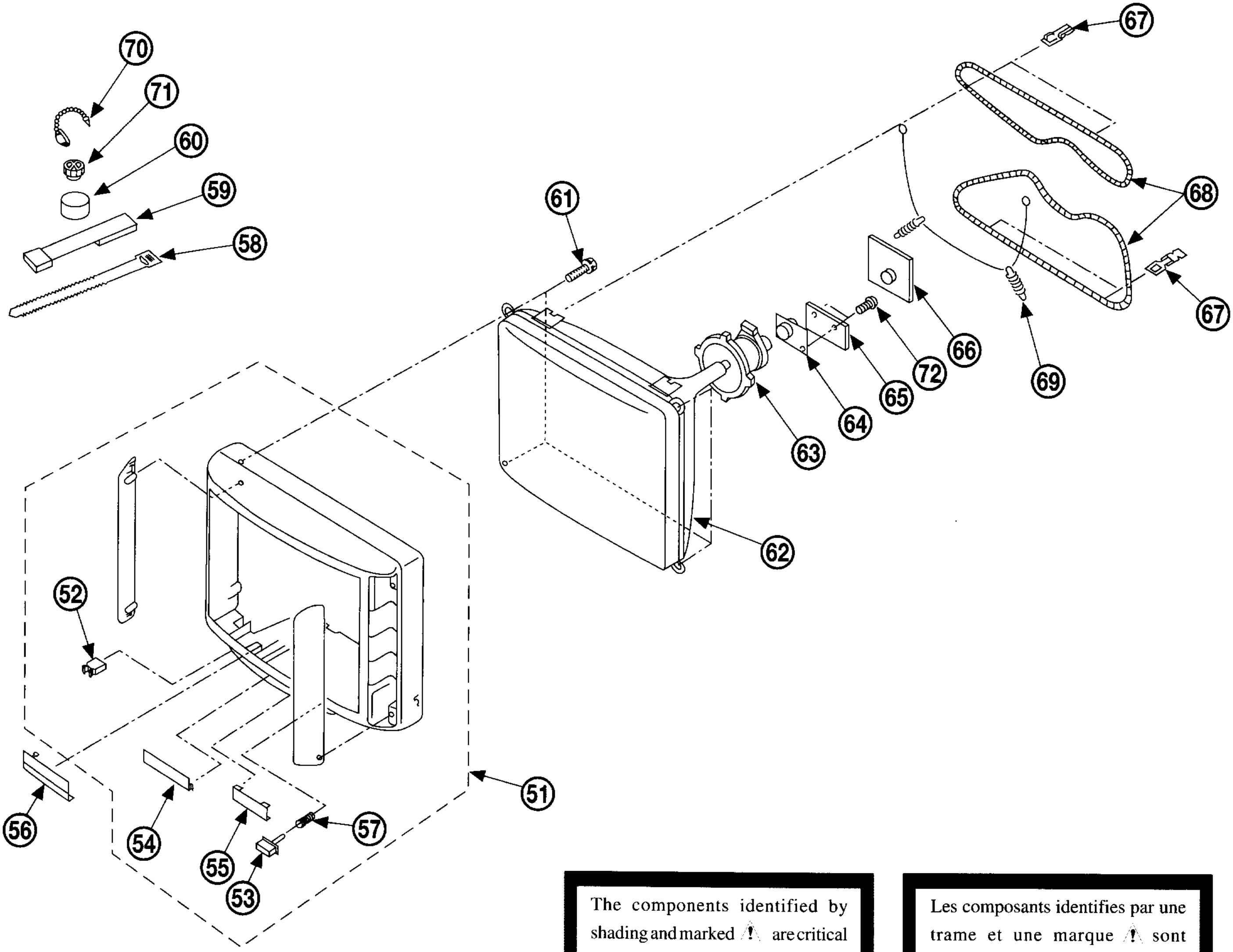
LD-201VR


ANODE
CATHODE

6-1. CHASSIS


⑮
⑨
⑧
④
⑤
⑦
⑥
③
⑩
⑪
②
①
⑫
⑬
⑭
⑲
㉑
⑳
⑱
⑰
⑯
⑮

6-2. PICTURE TUBE



67
70
71
60
59
58
61
68
67
66
72
65
64
63
69
62
52
51
56
54
55
53
57

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

SERVICE MANUAL

AE-2F CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-X2991A	RM-831	Italian	SCC-G76C-A	KV-X2993E	RM-831	Spanish	SCC-G78C-A
KV-X2993B	RM-831	French	SCC-G75C-A				
KV-X2991D	RM-831	AEP	SCC-G72D-A				

SUPPLEMENT

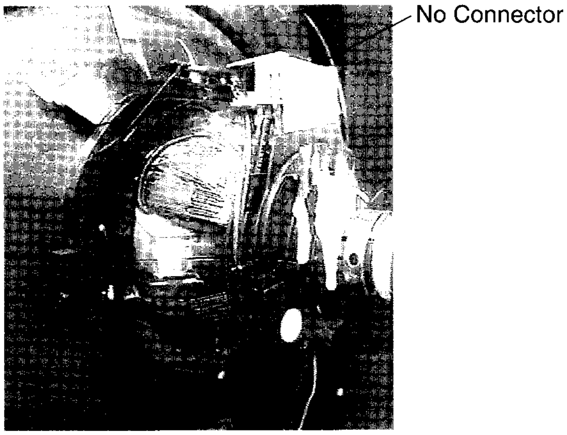
SUBJECT : CHANGE OF PART NUMBERS

File this supplement with the service manual

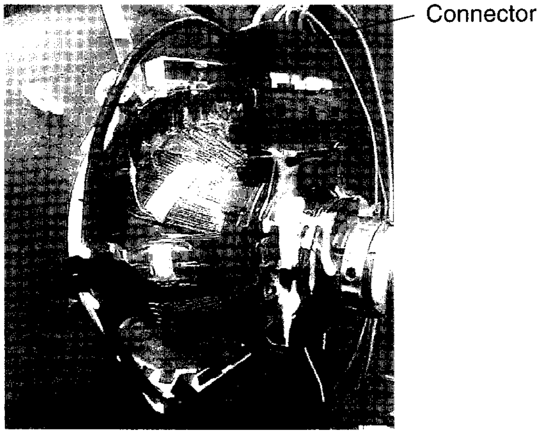
INTRODUCTION : **Change in CRT type from GX to GX2. Identified by different Deflection yolks. The Service Manual part no 9-974-854-01 covers the GX CRT version. The following differences would apply to models fitted with the GX2 CRT type.**

HOW TO IDENTIFY:

GX CRT VERSION



GX2 CRT VERSION



MICROFILM

TRINITRON® COLOR TV

SONY®

SONY

SERVICE MANUAL

AE-2F CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-X2991A	RM-831	Italian	SCC-G76C-A	KV-X2993E	RM-831	Spanish	SCC-G78C-A
KV-X2993B	RM-831	French	SCC-G75C-A				
KV-X2991D	RM-831	AEP	SCC-G72D-A				

CORRECTION

SUBJECT : HOW TO ENTER INTO SERVICE MODE

File this supplement with the service manual

☛ : Corrected portion

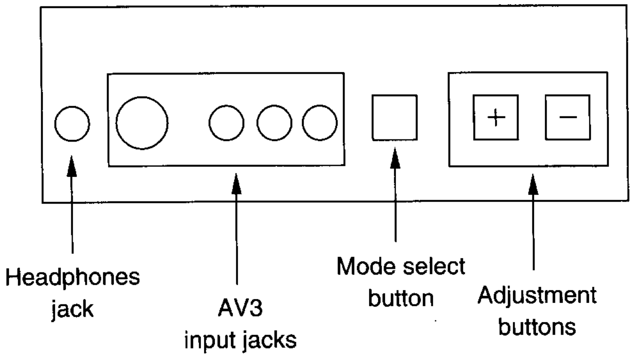
INCORRECT

4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander RM-831.

HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch of the set.Then press ⏻ button of the remote commander twice.



+
−
Headphones jack
AV3 input jacks
Mode select button
Adjustment buttons

CORRECT

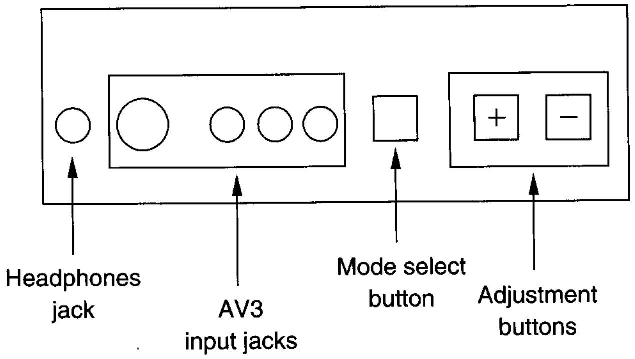
4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander RM-831.

HOW TO ENTER INTO SERVICE MODE

☛

1. Turn on the main power switch of the set while pressing any two buttons on the front panel.



+
−
Headphones jack
AV3 input jacks
Mode select button
Adjustment buttons

MICROFILM

9-974-854-91

Sony Corporation
Consumer A & V Products Company
TV & Display Products Div.

English
95JP7158-1
Printed in U.K.

© 1995.10